

The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1683.—VOL. XXXVII.

LONDON, SATURDAY, NOVEMBER 23, 1867.

(WITH SUPPLEMENT) {STAMPED SIXPENCE UNSTAMPED FIVEPENCE

The Mining Exchange, London.

NOTICE.—THE BUSINESS OF THE MINING EXCHANGE will, for the future, be carried on at No. 5, FINCH LANE, LONDON, E.C. The Rules and Regulations of the Mining Exchange are similar to those of the Stock Exchange, one of which strictly prohibits the Members from advertising shares, either directly or indirectly, at fixed prices. Nov. 1, 1867. By order of the Committee, W. E. JOHNSON, Sec.

MR. JAMES CROFTS, STOCK AND SHAREBROKER,
No. 1, FINCH LANE, CORNHILL.
(Established 24 years.)

HOLDERS of mining shares difficult of sale in the open market may find purchasers for the same through Mr. CROFTS' agency. Also parties requiring advice how to act in the disposal or abandonment of doubtful mining stocks may profitably avail of Mr. CROFTS' long experience on the market in all cases of doubt or difficulty, legal or otherwise.

The following moderate priced mines, paying regular dividends, are specially recommended for investment. The rate of dividend per annum on each mine will be furnished on application.—East Caradon, East Lovell, Great Laxey, Great Wheal Vor, Prince of Wales, Providence, West Chiverton, Wheal Bassett, Wheal Mary Ann, West Seton, Herodfoot, South Frances, and Wheal Kitty (St. Agnes).

* Mr. CROFTS offers advice respecting mining shares to BUY, SELL, or ADVISE. Bankers: National Bank of Scotland, Finch-lane.

MR. JOHN BUMPUS, 44, THREADNEEDLE STREET,
has FOR SALE the following shares, free of commission:—

40 Anglo-Brazilian, 12s.	25 East Carn Brea, £23 0	5 Providence, £23 0
25 Bryn Gwlog, 23s.	5 E. Wh. Lovell, £2 1/2	50 Pestarens, £2 13s 9d
50 Caldbeck Fells, 11s.	20 East Russell, 35s. 3d.	50 Redmoor, 2s. 6d.
10 Clifford, £8 8s. 9d.	50 Frontino, 18s. 6d.	30 South Frances, £21 1/2
5 Caradon Consols.	15 Great Laxey, £17 1/2	20 South Darren, 25s.
50 Chontales (£1 1/2 pd.),	10 Gl. Wh. Vor, £18.	2 St. John del Rey, £59 1/2
£2 11s. 3d.	50 No. Treskerby, 34s. 9d.	100 Worthing, 10s. 6d.
50 Drake Walls.	15 No. Crofty, £2 17s. 6d.	10 Wh. Chiverton, £25 1/2
75 Don Pedro, £2 14s 9d	50 New Birch Tor, 12s 6d	3 Wheal Seton, £101 1/2
10 East Rosewarne, 7s 3d	50 New Quebrada, 19s.	50 W. Wh. Kitty, 15s. 6d
20 E. Wh. Seton, 5s. 9d.	20 Old Westminster, £4 1/2	20 Wheal Grenville, £2s.
15 East Caradon, £6.	50 Prince of Wales, 51s 6	

BUYER of West Rose Downs, Croake, West Drake Walls, Marke Valley, Wheal Seton, and Great North Downs shares at full market rates.

GUIDE TO INVESTORS.—MR. LELEAN'S STOCK, SHARE, AND FINANCE REGISTER for November, contains a comprehensive review of the Stock and Share Markets; a list of all the dividends paid in October; a selection of investments paying 10 to 16 per cent.; and such information as is necessary to guide intending investors. 6d. per copy, or 5s. annually, post free.

Published by Mr. BAKER LELEAN, at his offices, 11, Royal Exchange, London.

MR. WILLIAM WARP,
STOCK AND SHAREDEALER,
No. 29, THREADNEEDLE STREET, LONDON, E.C.

MR. JOHN BATTERS, STOCK AND MINING
SHAREBROKER, 13, THROMORTON STREET, LONDON, E.C.

MR. WILLIAM SEWARD, STOCK AND SHAREDEALER,
19, THROMORTON STREET, LONDON, E.C.

MR. E. J. BARTLETT, STOCK AND SHAREDEALER,
30, GREAT ST. HELEN'S, E.C.

MESSRS. WARD AND JACKMAN,
STOCK AND SHAREDEALERS,
(Established Thirteen years.)
CUSHION COURT, OLD BROAD STREET, CITY, E.C.
(Members of the Mining Exchange.)

Closing Prices, Friday Evening, November 22:—

Anglo-Brazilian..... 9s. to 11s.	New Wheal Seton..... £50 to £60
Bryn Gwlog..... 23s. to 24s.	North Downs..... 7s. to 8s.
Chontales..... (Dis.) 1/2	North Roskear..... 6s. to 7s.
Chiverton Moor..... 5s. to 6s.	North Treskerby..... 32s. 6d. to 35s.
Clifford Amalgamated..... 6s. to 6 1/2	North Wheal Crofty..... 27s. to 28s.
Devon Great Consols..... 42s. to 43s.	Prince of Wales..... 50s. to 52s.
Don Pedro..... (prem.) 2 1/2 to 2 3/4	Providence..... 29s. to 30s.
Drake Walls..... 11s. to 12s.	South Bassett..... 5 1/2 to 6 1/2
East Caradon..... 23s. to 24s.	South Wheal Frances..... 31s. to 33s.
East Carn Brea..... 23s. to 24s.	Tincroft..... 13s. to 14s.
East Lovell..... 8s. to 9s.	West Bassett..... 30s. to 35s.
East Wheal Russell..... 32s. 6d. to 35s.	West Chiverton..... 6s. to 7s.
Frontino and Bolivia..... 17s. to 19s.	West Caradon..... 6 1/2 to 7 1/2
Great Laxey..... 17 1/2 to 17 3/4	West Drake Walls..... 6s. to 7s.
Great Retallack..... 33s. to 35s.	West Prince of Wales..... 9s. to 11s.
Great Wheal Vor..... 17 1/2 to 18	West Wheal Seton..... 18s. to 19s.
Great South Tolgus..... 7s. to 8s.	Wheal Agar..... 35s. to 40s.
Herodfoot..... 38s. to 40s.	Wheal Bassett..... 90s. to 95s.
Marke Valley..... 6 1/2 to 6 3/4	Wheal Grenville..... 24s. to 26s.
Messrs. WARD and JACKMAN are in possession of valuable information respecting many of the above-mentioned Mines, and without pretending to be prophets, they believe, if indications and analogy go for anything, success is morally certain. They refer to their remarks on page 791.	Wheal Seton..... 99s. to 110s.

Nov. 22, 1867. Bankers: London and Westminster, Lothbury.

MR. EDWARD BREWIS, PALMERSTON BUILDINGS,
34, OLD BROAD STREET, LONDON, E.C., has FOR SALE:—10 North Crofty, 25 East Bottle Hill, 2 West Chiverton, 10 Grenville, 25 Heanock Iron, 10 Chiverton, 25 West Prince of Wales, 2 Bullers, 5 Summer Hill Lead, 20 Harwood, 25 Cashwell, 10 West Cornwall Granite, £7 1/2 paid, 15 Chontales, 20 West Kitty. BUSINESS in all shares having a market value.
Bankers: National Bank, London, E.C.

JOHN RISLEY, STOCK AND SHAREBROKER
(SWORN BROKER),
48, THREADNEEDLE STREET, LONDON, E.C.
J. RISLEY recommends the purchase of shares in Wheal Grenville, East Grenville, Great Retallack, North Retallack, and East Wheal Russell, as they are likely to rise 30 per cent. in a short time.
Bankers: London and Westminster, Lothbury.

GEORGE RICE, STOCK AND SHAREDEALER, 78, OLD
BROAD STREET, LONDON, E.C. (Member of the Mining Exchange).
(25 years' experience), TRANSACTS BUSINESS in MINING SHARES, at close prices.
Money advanced on mining shares.
Nov. 22, 1867. Bankers: Bank of England.

MR. WILLIAM MARLBOROUGH, 1, GREAT ST. HELEN'S,
BISHOPSGATE STREET, LONDON, E.C. (Established 13 years), has FOR SALE the FOLLOWING SHARES, at net prices:—

50 Anglo-Brazilian, 11s.	25 Bryn Gwlog, 20s. 9d.	30 Chontales, £1 dis.
10 Chiverton Moor, £6 1/2	10 Clifford, £6 1/2	20 Don Pedro, £2 1/2 pm.
20 Drake Walls, 12s. 3d.	10 E. Carn Brea, £2 6 3/4	15 East Grenville, £2s.
20 East Russell, 34s. 6d.	10 Frontino, 18s. 9d.	20 Gt. So. Tolgus, 18s. 6d
10 Marke Valley, £2 1/2	25 North Downs, 18s. 9d	40 No. Treskerby, 34s. 6d
15 No. Crofty, £2 18s 9d	20 Prince of Wales, 51s 6	50 No. Retallack, £2 1/2
75 No. Grenville, 2s. 3d.	5 Tincroft, £1 1/2	25 West Bassett, 32s. 6d.
20 Wh. Grenville, 24s 9d	10 Wh. Kitty (St. Agn.),	1 Wheal Seton, £101 1/2
40 Wheal Crebhor, 7s.	ex div., £2 1/2	20 West Kitty, 13s. 9d.
50 Wh. Trevenna, 37s. 6d.	30 West St. Ives, 6s. 9d.	80 Okhampton, 16s. 6d.

W. MARLBOROUGH is a BUYER or SELLER of Tamar Valley shares.

MR. GEORGE BUDGE, STOCK AND SHAREDEALER,
No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 19 years), has FOR SALE at net prices:—20 South Darren, 22s. 6d.; 2 Minera, £28s.; 1 Devon Great Consols, £42 1/2; 7 Maes-y-safn, £29 1/2; 10 Summer Hill, £12 1/2; 20 Frank Mills, 17s.; 40 West Wheal Kitty, 14s. 9d.; 40 Gawton, £2 9s. 9d.; 25 Great North Downs, £4 1/2; 20 Rose and Chiverton United, 50 Okei Tor, 20s.; 100 West St. Ives, 40 West Drake Walls, 7s.; 45 Dale, 2s. 9d.; 110 West Trevenna, 7s. 3d.; 25 Great South Tolgus, 100 Don Pedro, 150 Anglo-Brazilian; 40 Great South Chiverton; 15 North Retallack, £4 1/2; 1 Margery, £6 11s. 9d.; 70 East Bottle Hill, 3s.; 20 North Downs, 18s.; 100 Redmoor, 2s.; 10 Marke Valley; 50 South Grenville, 2s. 3d.; 50 Chontales, £2 1/2; 50 Lovell Consols; 40 New Lovell, 10s.; 50 East Rosewarne; 20 Bryn Gwlog; 50 Rossa Grande; 20 Great North Laxey, 15s.; 60 New Quebrada; 20 South Herodfoot; 60 Camborne Vein, 18s. 9d.; 2 Providence; 10 West Great Work; 25 Wheal Kitty (St. Agnes), £3; 20 East Gunnislake.

CORNWALL AND DEVON MINES—

FOREIGN GOLD MINES, &c.
PETER WATSON'S WEEKLY MINING CIRCULAR AND SHARE LIST—SYNOPSIS OF CORNISH AND DEVON MINES, Friday, Nov. 22, No. 451, Vol. IX., price 6d. each copy, forwarded on application, contains information on the following mines:—

North Wh. Chiverton.	Great Wheal Vor.	Wheal Buller.
West Chiverton.	Trumpet Consols.	Providence.
Chiverton Moor.	Carn Brea.	Bryn Gwlog.
East Wheal Russell.	Tincroft.	East Wheal Grenville.
East Wheal Lovell.	North Downs.	Caradon Consols.
Wheal Seton.	West Great Work.	Devon Great Consols.
West Wheal Seton.	New Wheal Seton.	East Wheal Bassett.
North Wheal Crofty.	West Drake Walls.	Great Retallack.
West Caradon.	Marke Valley.	South Frances.
South Caradon.	Wheal Trelawny.	Great South Tolgus.
Wheal Jane.	East Carn Brea.	East Wheal Grenville.
North Roskear.	Prince of Wales.	Don Pedro.
Gawton.	Wheal Agar.	Chontales.
North Treskerby.	Wheal Bassett.	Frontino.
Cargoll.	Wheal Kitty.	Anglo-Brazilian.
Wheal Grenville.	West Wheal Kitty.	St. John del Rey.
East Caradon.	East Pool.	Rossa Grande.

With a Leading Article on the Chontales Gold Mines, Advance in the Copper Standard, &c.
PETER WATSON, Stock and Sharedealer, 79, Old Broad-street, London, E.C.

THE LONDON DAILY RECORD—STOCK AND SHARE
LIST—STOCK EXCHANGE SECURITIES. Published every evening at 5 o'clock. It contains the latest prices of railways, banks, mines, foreign stocks and bonds, financial, insurance, and miscellaneous shares, remarks on the daily rise and fall in prices, with advice as to purchase and sales. Annual subscription, £1 1s.; by post, £2 5s.; monthly subscription—by post, 4s.; single copy, 1d.; by post, 2d.

PETER WATSON, Stock and Sharedealer, 79, Old Broad-street, London, E.C.

INVESTMENT OR SPECULATION.—A SELECTED LIST OF
RAILWAYS, BANKS, MINES, COLONIAL SECURITIES, FOREIGN GOVERNMENT BONDS, &c., forwarded to bona fide investors on application, in addition to the high rate of interest many of the above are paying, there is now every probability of a great rise in market value.

PETER WATSON, STOCK AND SHAREDEALER,
79, OLD BROAD STREET, LONDON
(three doors only from Hercules-passage, entrance to the Stock Exchange).
Twenty-three years' experience.
(Two in Cornhill and Twenty-one in London.)
Bankers: The Alliance Bank, and the Union Bank of London.
References given and required (when necessary) in all the principal towns of the United Kingdom.

MR. EDWARD COOKE, STOCK AND SHAREDEALER,
76, OLD BROAD STREET, LONDON, E.C.
Orders for all kinds of Stock Exchange securities, either by letter or telegraph, promptly attended to.
N.B.—A Daily Price List on application.
Satisfactory references given in any town in the United Kingdom.
Bankers: Alliance Bank.

MR. W. H. CUELLO
(late of the firm of WATSON and CUELLO),
STOCK AND SHAREDEALER
1, FINCH LANE, CORNHILL.
References exchanged.
All transactions can be for cash or account.
Bankers: Bank of England.

MR. T. ROSEWARNE, 81, OLD BROAD STREET,
LONDON, has BUSINESS in the following shares for cash or time on:—

*Clifford.	*Frontino.	*Prince of Wales.
*Chiverton Moor.	*Gawton.	*North Treskerby.
*Chontales.	*Great North Downs.	*South Grenville.
*Devon Consols.	*Great South Chiverton.	*Wheal Seton.
*Don Pedro.	*Great Retallack.	*West Seton.
*East Russell.	*Marke Valley.	*Wheal Agar.
*East Carn Brea.	*North Crofty.	

PRINCE OF WALES.—My reports to-day are the most encouraging I ever received from this mine. The 55 west is valued at £25, and the 55 east, from all appearances, will be worth over £40 the next time the lode is taken down. Shares are 50s. to 52s., and should be bought at once. I am a BUYER of any part of 2000 shares, also of 2000 East Carn Brea, 2000 Okei Tor, 1000 North Treskerby, 500 Chiverton Moor, 2000 Frontino, 500 Wheal Agar, 500 Don Pedro, 200 Rossa Grande, and 500 Pestarens.

AN OFFER WANTED FOR GREAT GRENVILLE.
T. ROSEWARNE can recommend three mines which are safe to have a great rise; he should be consulted at once upon the matter.
SPECIAL BUSINESS in the shares marked thus *.
Money advanced on good mining shares. Office hours from 10 to 4.
Bankers: Bank of England.

MR. J. B. REYNOLDS, STOCK AND SHAREDEALER,
70 and 71, BISHOPSGATE STREET WITHIN, LONDON, E.C., particularly recommends the purchase of sound mining securities. The experience of the past illustrates the wisdom of this advice.
Mr. REYNOLDS refers with pleasure to the present position of mines which he has from time to time recommended, and feels assured that there is a very favourable future in store for them.
Business transacted at net prices in all kinds of stocks and shares. Mines inspected on very advantageous terms.
Mr. REYNOLDS is ready to do business in:—

West Wheal Kitty.	Rose and Chiverton.	Chontales.
West St. Ives.	West Chiverton.	Great Wheal Vor.
West Great Work.	Wheal Chiverton.	North Crofty.

Bankers: City Bank.
Established Eleven Years.
70 and 71, Bishopsgate-street Within, London, E.C.

WEST ST. IVES.—MR. J. B. REYNOLDS is a BUYER
of any number of SHARES in this company. Sellers will please state lowest price. Orders to inspect available any day in the week, and can be obtained by any Shareholder on application to the SECRETARY.
70 and 71, Bishopsgate-street Within, London, E.C., Nov. 22, 1867.

MESSRS. FREDERIC GILL AND CO., STOCK AND
SHAREDEALERS, ST. CLEMENT'S HOUSE, CLEMENT'S LANE,
LONDON, E.C., TRANSACT BUSINESS in ALL MINING STOCKS
SHARES at closest market net prices, either for cash or account.

MESSRS. POWELL AND MOSS, STOCK AND
SHAREDEALERS, 78, OLD BROAD STREET, LONDON, E.C., and
Members of the Mining Exchange.
Bankers: Bank of England.

MESSRS. JAMES D. GINN AND CO.,
STOCK AND SHAREDEALERS,
3, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.
Closing Market Prices, Friday Evening, Nov. 22, 1867:—

Chontales (Limited)..... £ 3 1/4 - £ 3 1/2	North Downs..... 17s. 6d. - 22s. 6d
Carn Brea..... 22 1/2 - 23	North Treskerby..... 32s. 6d. - 35s.
Chiverton Moor..... 6 - 6 1/2	North Wheal Crofty..... £ 2 1/2 - £ 2 3/4
Clifford Amalgamated..... 6 1/2 - 6 3/4	Prince of Wales..... 50s. - 52s. 6d
East Bassett..... 11 - 12	Providence..... 29 - 30
East Caradon..... 35 1/2 - 36	South Wheal Frances..... 31 - 33
East Carn Brea..... 2 - 2 1/2	Tincroft..... 13 1/2 - 14
East Wheal Lovell..... 8 - 8 1/2	West Caradon..... 180 - 190
East Wheal Russell..... 32s. 6d. - 35s.	West Wheal Seton..... 180 - 190
Great Retallack..... 3 1/2 - 3 3/4	Wheal Seton..... 97 1/2 - 102 1/2
New Wheal Seton..... 47 1/2 - 52 1/2	Wheal Grenville..... 24s. - 26s.

Messrs. GINN and Co. will forward a List of Closing Market Prices on application GRATIS.—Bankers: Messrs. Glyn, Mills, Currie, and Co.

INVESTMENT, LOAN, AND BANK AGENCY.
Established 1839.
Investments and Sales of every description of Public Securities can be effected, either for immediate or deferred settlement, as may be agreed upon.
Loans granted, for one year or any shorter period, on Stocks and Shares having a market value.
Deposits of all amounts received at 5 per cent.
The Finance Agency of Foreign Governments, Municipalities, Public Companies, and Money Agency Business generally undertaken.
RICHARD TAYLOR AND COMPANY.
No. 12, Clement's-lane, Lombard-street, London, E.C.

MR. CHARLES THOMAS,
MINING AGENT, GENERAL SHAREDEALER, AND AUCTIONEER,
3, GREAT ST. HELEN'S, LONDON, E.C., deals in all kinds of securities, and is always prepared to BUY or SELL shares in:—

Devon Great Consols.	West Seton.	Providence.
Great Wheal Vor.	Wheal Bassett.	West Chiverton.
Herodfoot.	East Caradon.	Wheal Seton.
Prince of Wales.	East Lovell.	Trelawny.
Tincroft.	Marke Valley.	

MR. CHARLES THOMAS conducts private negotiations and public sales of mining properties, being eminently fitted for both services through many years' practical experience among the mines of Cornwall and Devon, and by reason of an elaborate system of correspondence with the various mining districts.

Now ready, price One Shilling; post-free, fourteen stamps.
MINING FIELDS OF THE WEST:
A PRACTICAL EXPOSITION OF THE
PRINCIPAL MINES AND MINING DISTRICTS OF CORNWALL AND DEVON.
Published by CHARLES THOMAS.
At No. 3, Great St. Helen's, London, E.C.

MESSRS. LANE AND GIBBS, 2, ROYAL EXCHANGE,
LONDON, E.C. (Members of the Mining Exchange), STOCK AND
SHAREDEALERS, transact business in all kinds of securities at closest net
prices for cash or account.
HOLDERS of shares in East Caradon, North Crofty, Great North Downs
Marke Valley, Gawton Copper, Great Laxey, and West Chiverton Mines, will
always find a ready market by applying to the above.
Daily price list on application.
Bankers: London and County Bank.

SHARP'S GUIDE TO SHAREHOLDERS.
SHARP'S GUIDE TO CAPITALISTS.
SHARP'S GUIDE TO TRUSTEES.
SHARP'S GUIDE TO INVESTORS.
SHAREHOLDERS, CAPITALISTS, TRUSTEES, INVESTORS,
requiring valuable and reliable information, and seeking safe, sound, and
profitable investments, paying good dividends, should at all times consult
SHARP'S GENERAL INVESTMENT CIRCULAR.
It is a "Safe Guide" for One and All.
GRANVILLE SHARP, STOCK AND SHAREDEALER,
No. 32, POULTRY, LONDON, E.C.
Circular post free. [Established 1852.]

MR. HENRY MANSELL,
STOCK AND SHAREDEALER,
No. 44, THREADNEEDLE STREET, LONDON, E.C.
Member of the Mining Exchange.
Bankers: London Joint-Stock Bank.

TILLY AND THOMAS,
PUBLIC AUDITORS AND ACCOUNTANTS,
1, CIRCUS PLACE, FINSBURY CIRCUS,
LONDON, E.C.

MATTHEW GREENE, STOCK AND SHAREDEALER,
ST. MICHAEL'S HOUSE, CORNHILL, LONDON, E.C.
MR. MATTHEW GREENE recommends for immediate purchase Tamar Valley
Silver-Lead shares, now selling at 15s. per share, and certain for a rise. Parties
desirous of investing in this most promising lead mine should apply at once;
specimens of the lode, and every particular can be had at Mr. MATTHEW
GREENE'S office.
MR. MATTHEW GREENE confidently asserts that no such chance is at present
to be had as the shares in this mine. The lode continuing to be of this value
will enable the mine to pay handsome dividends.

MR. THOMAS THOMPSON, MINING OFFICES,
12, OLD JEWRY CHAMBERS, LONDON, E.C.

MR. JAMES HUME, STOCK AND SHAREDEALER,
74, OLD BROAD STREET, LONDON, has BUSINESS as BUYER or
SELLER in North Treskerby, Prince of Wales, Clifford, Seton, West Chiverton,
Chiverton Moor, North Downs, East Russell, East Carn Brea, East Caradon,
Marke Valley, East Providence, Providence, Great Retallack, Carn Brea, Drake
Walls.
TAMAR VALLEY.—SPECIAL BUSINESS in this highly-promising mine, and
in other rising properties at low prices, from which Mr. HUME anticipates
great results.
MR. J. HUME'S "Circular" for November now ready, price 6d., or 5s. annually.
Bankers: The London Joint-Stock Bank.

CHONTALES GOLD COMPANY.—FULL PARTICULARS OF
THE DIFFERENT CLASSES OF SHARES can be obtained on application
to Mr. J. H. MURCHISON, No. 8, Austinfriars, E.C.

BARTLETT AND CHAPMAN, STOCK AND
SHAREDEALERS, 2, BUCKLESBURY, LONDON, E.C.
Business transacted in every description of securities at close market prices,
free of commission.
LOVELL CONSOLS.—We strongly recommend this mine for an immediate
advance in price. The report from the manager, which appears in this day's
Journal, is highly satisfactory, and shares at the present price (12s. 6d. each)
are, without a doubt, the cheapest investment in the market. Every information,
with plans, &c., forwarded on application.
GREAT SOUTH CHIVERTON will soon speak for itself. Lead has been met in
the 30 west in large quantities, and the agents are confident that they will soon
open up valuable ore ground. An investment of £1000 in this property at the
present low price (20s.) will double itself in six months.
Both these mines are not worked for market operations, and intending
investors will do well to make every enquiry before purchasing shares. We re-
commend the Lovell Consols and Great South Chiverton on their merits only,
without regard to market operations. We shall be glad to furnish any person
with an order to inspect either mine, so that they may see for themselves.

BARTLETT AND CHAPMAN have several shares for sale that will pay from
8 to 12 per cent., and others which are likely to advance 100 or 200 per cent.
within a short time. Particulars forwarded to intending investors on appli-
cation.

BARTLETT AND CHAPMAN'S "Investment Circular" for this month con-
tains valuable information respecting Rosewarne Consols, Great South Chiverton,
Lovell Consols, East Providence, and Lincoln Gold Company, several inter-
esting commercial articles, and the epitome of 53 companies' meetings. Post
free on application.
Bankers: London and Westminster Bank.
No. 2, Bucklebury, London, E.C., November 22, 1867.

NOTICE TO COUNTRY INVESTORS.
BARTLETT AND CHAPMAN beg to inform the readers of the MINING JOURNAL
that, although they do not advertise shares for sale at stated prices, they
are always in a position to negotiate business for their clients and the public,
either as BUYERS or SELLERS, at the closest market prices of the day, free
of commission. The fluctuations in mining shares being so great, unnecessary
correspondence is avoided by not inserting a list of shares for sale at fixed prices.

MR. G. D. SANDY, STOCK AND SHAREDEALER,
No. 48, THREADNEEDLE STREET, LONDON, E.C., TRANSACTS
BUSINESS in EVERY DESCRIPTION OF STOCK EXCHANGE SECURITIES,
MINING AND FINANCIAL ENTERPRISES, at close market prices.
SPECIAL NOTICE.—WHEAL AGAR: The lode in the 150 continues good, and is
fully 7 feet wide, driving at £3 per fathom. The old whim-shaft is being sunk
as rapidly as possible, in expectation of cutting the great lode of East Pool. The
prospects of this mine becoming speedily a profitably productive one are un-
paralleled in Cornwall.

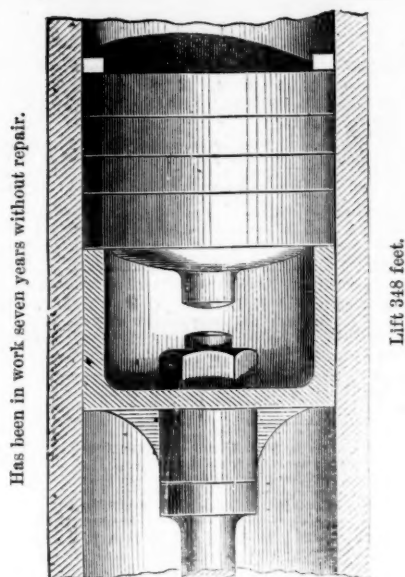
TAMAR VALLEY.—I have just seen the specimens of the lode sent to the office
referred to in the agents' reports in this day's Journal, which justifies me in
continuing to recommend the immediate purchase of the shares.
Money advanced to any amount on legitimate stocks and shares.
References exchanged.

MR. J. N. MAUGHAN, STOCK AND SHAREBROKER
(Member of the Stock Exchange).
No. 2, COLLINGWOOD STREET, NEWCASTLE-ON-TYNE.
Transacts business in Railways, Funds, and every description of Mines.
Bankers.—Messrs. Lambton and Co.

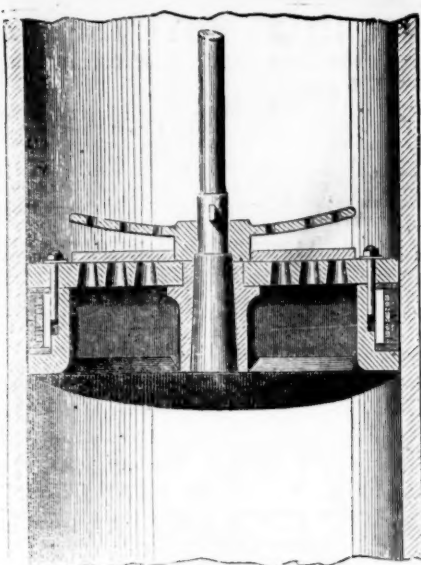
MATHER AND PLATT

MILLWRIGHTS, ENGINEERS, AND MACHINE MAKERS,

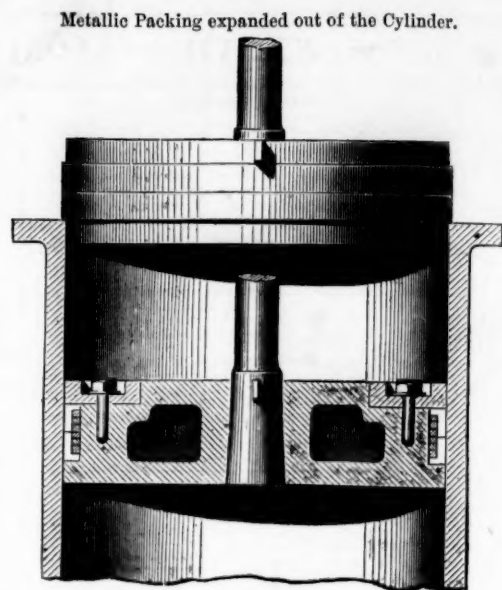
SALFORD IRON WORKS, MANCHESTER.



COLD WATER PUMP FOR DEEP LIFTS.



AIR-PUMP BUCKET.



PISTON IN THE CYLINDER.

MATHER and PLATT beg to call the attention of ENGINEERS and USERS of STEAM POWER to their PATENT PISTONS, AIR PUMP BUCKETS, and COLD WATER PUMPS. The estimation in which these Pistons, &c., are held is shown by the fact that 4760 have been made, as well as by the following Testimonials from gentlemen whose large experience and extensive practice enable them to judge of their qualifications:—

"GENTLEMEN,—During the last 19 years, commencing in 1848, I have put in upwards of 33 of your patent metallic pistons and pump-buckets, into 49 engines and 20 pumps, under my care at the Bridgewater Trustees' Collieries. I can bear testimony to the very efficient and economical working of the same, and feel confident that with ordinary care they will give general satisfaction, wherever brought into use, possessing, as they do, many practical advantages over other pistons and buckets, being simple, durable, and effective. I have one piston (No. 671) which has been working daily for more than 15 years, one (No. 1586) 10 years, and one (No. 2246) over 7 years, without cost of repairs or trouble of any kind, except occasional cleaning. The smooth and highly polished condition of the cylinders during this length of time convinces me that the action of the metallic packing is so equable and perfect as to render the piston steam-tight and self-adjusting, without producing any appreciable friction. I have had two of your patent metallic pump-buckets working daily for over seven years, one lifting 300 feet, and one 348 feet, and both are yet performing good duty. I am now putting in one of 10 inches diameter patent buckets, to work 10 strokes, of 8 feet 4 inches per minute, under a pressure of 12 atmospheres, and feel confident of success, thus showing the superiority over other buckets, more especially where long lifts and simplicity are required. I herewith hand you an order for a 53-inch diameter piston and rod complete, also air-pump bucket, 26½ inches diameter, and rod complete. Hoping you will forward the same to these collieries as early as practicable,

"Messrs. Mather and Platt, Salford Ironworks, Manchester."

"Bridgewater Collieries, Walkden, Bolton-le-Moors, October 26, 1867.

"I remain, Gentlemen, yours very respectfully,

"JESSE TIMMINS, Colliery Engineer.

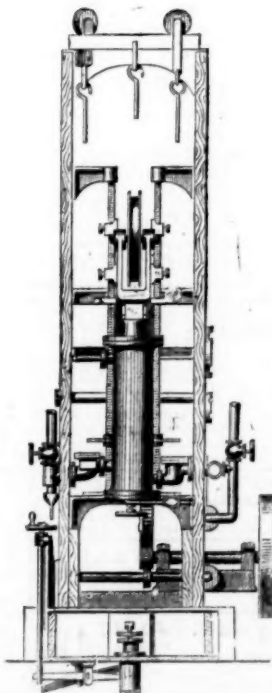
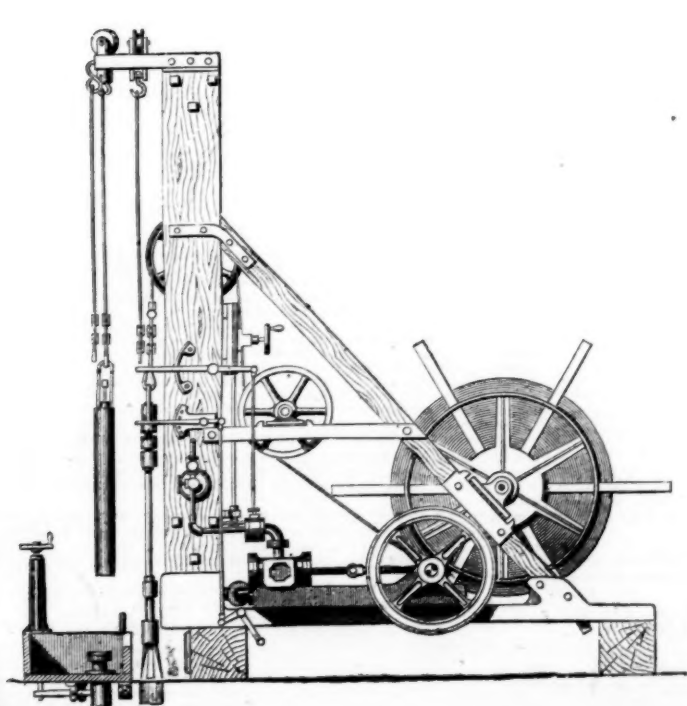
"GENTLEMEN,—I have ordered direct on, included in specifications of engines which I have prepared, upwards of 100 of your pistons and buckets, between the years 1850 and 1867, and I feel convinced they are the best pistons that have come under my notice, and if any proof was wanting as to my opinion of them, it may be found in the fact of my ordering the last 70 inch piston from you for our present works.

"Messrs. Mather and Platt, Salford Ironworks, Manchester."

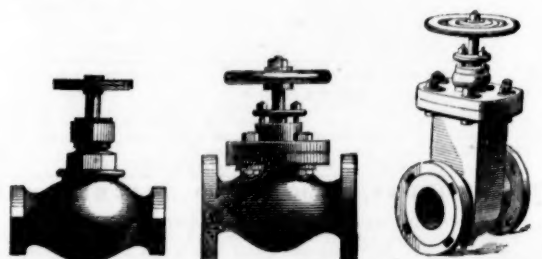
"Frampton Cottrell, near Bristol, October 31, 1867.

"I remain, Gentlemen, yours truly,

"WILLIAM BAILEY.



M. and P. beg to call attention to their Revised List of Prices of VALVES, TAPS, &c. They also request the notice of Water Companies and Hydraulic Engineers to their IMPROVED SLUICE VALVES for Water. The slides have Gun-metal Facings, are of Wedge form, and when screwed down are tight on both sides:—



GUN METAL TAPS.		CAST IRON STEAM VALVES, WITH GUN METAL VALVES AND SEATINGS.		CAST IRON SLUICE VALVES, WITH GUN METAL FACINGS.	
Bore. Inches.	Price. £ s. d.	Bore. Inches.	Price. £ s. d.	Bore. Inches.	Price. £ s. d.
3/4	0 4 0	2	1 2 6	2	1 10 0
1	0 4 6	3	1 17 6	3	2 5 0
1 1/4	0 6 0	4	2 15 0	4	3 0 0
1 1/2	0 8 6	5	3 15 0	5	3 10 0
1 3/4	0 11 0	6	4 17 0	6	4 14 0
2	0 14 0	7	6 0 0	7	5 14 0
2 1/4	0 18 0	8	7 5 0	8	6 16 0
2 1/2	1 2 6	9	8 15 0	9	8 0 0
		10	10 10 0	10	9 6 0
		11	12 5 0	11	10 14 0
		12	14 0 0	12	12 4 0

IMPROVED PATENT EARTH BORING MACHINES.

A considerable number of these Machines has been in most successful operation for some years in exploring for minerals and coal and the boring of Artesian wells, for supplying many towns, manufactories, &c., with water. Upwards of 50 bore-holes, from 6 in. to 24 in. diameter, representing in all 20,000 ft. of boring, have been sunk in various parts of the world, through rocks of every form and degree of hardness, from the New Red Sandstone to the Igneous formations, as well as Chalk and the London Clay.

The Machine is worked entirely by steam-power, requiring a small boiler, from 6 to 12 horse power, according to diameter of the bore-holes. The framing is made of wood, to render the Machine of easy transport.

The rate of boring is not appreciably decreased as the depth increases, as a flat rope is used in place of rods in the old system.

The attention of those interested in Metallic Mining is called also to an

IMPROVED BUDDLE, OR ORE WASHING MACHINE,

Which they believe will be found of great benefit.

TERMS AND PARTICULARS CAN BE HAD ON APPLICATION.

Original Correspondence.

SAFETY-CAGES, AND OVER-WINDING—No. III.
HARPER'S SAFETY-CAGE.

SIR,—This safety-cage, or apparatus for stopping the descent of the cage in case of breakage of the rope, has been designed expressly for the purpose of being applied to cages working in wire-rope guides, and it is a very ingenious contrivance. The guide-rod, or rope, is encircled by means of a compressor. A clam and this apparatus is actuated by means of a spiral spring, the said spring being kept in check by means of chains attached to the winding-rope when the cage is working, and when the rope breaks the compressors are immediately brought into play by the release of those branch chains attached to the springs. Where iron rods or wire-ropes are in use there can be no doubt that this apparatus is fully calculated to produce the desired effect; and there is this great advantage, as compared with the working of similar appliances suitable for wooden slides, that the compressors of Mr. Harper cannot injure the iron guides, as they present a smooth surface to the guides, while it is well known that a great objection to the safety apparatus for wooden slides is the injury often done to the latter by catching during the ordinary working. Calton's Safety-Cage is the latest invention, and perhaps the most ingenious of the kind ever brought out. It differs in some material particulars from all previous cages, one of the most important peculiarity it possesses is that the apparatus is not connected with the working rope, but when the cage falls gravitation alone brings the machinery into play, consequently it is not liable to be brought into operation at the top and bottom of the shaft, but only when required. A more particular description of this remarkable cage will be given next week.

Newcastle-on-Tyne, Nov. 19.

M. E.

FERNDALE COLLIERY EXPLOSION.

SINGLE-SHIFT SYSTEM CAUSE OF DOUBLE THE LOSS OF LIFE.

SIR,—The terrible catastrophe in the Rhondda Valley makes me anxious again to press on the notice of my fellow coalowners and the public in general the advantages of a system of working collieries by which the loss of life, on such occasions as that which has now spread dismay through the district, would be reduced to nearly half of what it now is. I allude to the system of "double shift," which is in universal use in the Northumberland and Durham coal fields, and which I have long been endeavouring to introduce into South Wales. In the northern system there are two relays, or shifts, of men, working seven hours each; the first shift leaving the face of the works when the second shift commences work in the places vacated. In South Wales, and I believe in all other districts in Great Britain, except Durham and Northumberland, there is only one shift, and, consequently, all the colliers and workmen employed go down the pits in the morning, and remain until the day's work is finished at night. When, therefore, an explosion occurs in a colliery worked on the short hour, or double-shift principle, only about half the number of victims are exposed to destruction, as what there would be under the long hour, or single shift, system.

In every respect the double shift is equally advantageous to master and man. There is a much better supervision of the colliery, from the thorough organisation arising from a perfect division of labour, which makes every officer, and almost every workman, personally responsible for any neglect or carelessness. The coal getter is employed exclusively in cutting coal, and has nothing to do, as in the single shift, with examining the roof of the mine, setting timber, laying railway, &c., so that with ordinary exertion he can earn as much wages in seven hours with the double shift as he can get in eleven or twelve hours with the single shift. There is, however, no time for idling; he must keep vigorously at work, for he knows that his comrade of the second shift will turn him out, and take possession of his place, at the end of the first shift. Now, as twice the quantity of coal is got out of such working place with the double as compared with the single shift during the twelve hours the pit is at work, only half the extent of pit room or, in other words, half the number of working places is required in the former, as compared with the latter, system, and mark the great advantages that arise from such a state of things—

- 1.—The volume of gas exuding from the strata is probably little more than one-half.
- 2.—The quantity of air required to dilute it is diminished in the same proportion; consequently, where the ventilating power in any colliery under the single shift is only barely equal to the requirements of the colliery with the double shift, the same power would be greatly in excess.
- 3.—There is only half the number and extent of air passages or windings to keep open—one of the most important considerations in a "fery" colliery, with an inferior roof.
- 4.—Only half the number of air-doors: the leaving open of one for twenty minutes has been known to cause explosions, leading to the loss of hundreds of lives.
- 5.—Only half the quantity of temporary "brattice," the extensive use of which "throttles" or impedes the free passage of the air through the whole district where they are employed.
- 6.—Half the number of "splits" or divisions of the volume of air required for ventilating the workings, and, therefore, only half the number of "regulators" to attend to and adjust.
- 7.—Half the number of horse-roads to keep, the cost of which forms an important item in collieries where the pavement and roof of the coal seam have a tendency to approach each other, or "pouch."
- 8.—The working face of the coal seam moves twice as fast, and, therefore, the roof of the mine is much easier and better kept up, and loss of life from "falls" of the strata, from which accidents constantly occur, greatly diminished.

The last is a most important consideration, on account of the great proportion which accidents arising from falls of the roof bear to all other causes.

On the other hand, one would think that the advantage to the collier of spending half his day above ground, could hardly be over-rated, in addition to the privilege of being half his time out of the reach of accidents, and earning the same amount of wages in the short as in the long hours of labour. I deeply regret to say that such is not the case. The prejudice of the collier in favour of the old single shift system is so great, that every effort on the part of my firm hitherto has proved unsuccessful. I sent down some of our most intelligent workmen to the North of England, who remained at those collieries until they had an opportunity of thoroughly learning every part of the double shift system. When they returned they wrote me a report, approving of it in all its details. They explained all particulars to their fellow-workmen, recommending them to adopt it, but without the least success. We have some 1000 or 1200 workmen employed in our collieries, and, out of that number, we could not induce 200 to make trial of the short-hour, or double shift, for a period of two months, although on the condition that if not approved of by them at the end of that time it should be discontinued. It may be said that we ought to enforce the system. My reply is, no individual proprietor can do so, and I question whether any number of proprietors in any single locality have the power. In fact, nothing short of the whole of the iron and coalmasters of the district entering into a combination and arrangement to stop their works in case the double shift is not agreed to by the colliers, will ensure its introduction, and I despair of getting unanimity where there are such numbers to deal with.

The question arises, what is to be done to remedy such a lamentable state of things? My answer is, let the Mines Inspection Bill be at once amended, and a clause added—that no colliery liable to give off explosive gases shall be worked except on the double shift, or northern system. This Bill has been amended to meet the loss of life arising from having only a single shift. But the loss of life arising from having only a single shift, by which the lives of all the workmen are jeopardised, in place of the double shift, in which only about half the number are exposed to such a calamity, is of equal, if not of much greater, importance.

As the collieries which are being sunk and opened are each year getting deeper and more extensive, greater outlay of capital is required to complete and put them in operation, and in order to get any return of profit on the large outlay (some costing upwards of a

quarter of a million) increased numbers of workmen are obliged to be employed, and if employed on the one shift system, all are exposed to destruction, hence these increasing appalling calamities. I know collieries where there are 500 or 600 men employed at the same time, worked on the single shift system. The number of deaths arising from accidents in coal mines, as published in the report of the Inspector of Coal Mines for 1866, is 1484. In 1865 the number was only 984. There is, therefore, an increase of 500 deaths, or 50 per cent., and this awful loss of life must still go on increasing if the single shift system be allowed to remain in force.

I may state that I am managing partner of the firm of Nixon, Taylor, and Cory, who are owners of some of the largest collieries in Great Britain; a native of Newcastle-on-Tyne, and brought up as a viewer, or mining engineer, in that district. I have had twenty years' experience of coal mining in South Wales, and am perfectly acquainted with the nature of both the Welsh and Northern coal fields, and know practically the system of working pursued in each. In conclusion, I ask the powerful press of England, my brother coalowners—all parties interested in coal mines, and the humane and thoughtful of all classes, to join me in getting this single-shift system of North and South Wales, Yorkshire, the Midland, and other local districts—finally, a system which, I repeat, has caused double the loss of life from explosions of fire-damp—put an end to.

Cardiff, Nov. 20.

JOHN NIXON.

THE LATE EXPERIMENTS WITH SAFETY-LAMPS—No. I.

SIR,—The late experiments on safety-lamps, conducted at Hetton, Barnsley, and other places, have been, without doubt, the most elaborate and extensive made hitherto. Yet the result cannot be said to be entirely satisfactory, and that a wide-spread feeling of dissatisfaction prevails is evident, from the fact that the Lamp Committee connected with the Northern Institute of Mining Engineers has been re-appointed, and further investigations and experiments are to be carried out by them.

The cause of this dissatisfaction has not been the want of skill or care on the part of the experimenters, but simply on account of the very intricate, and to a great extent uncertain, nature of such experiments, however carefully carried out. Still, if the results of the late experiments at Hetton, Barnsley, and other places had shown any approximation to uniformity in results, they would, probably, have been accepted as decisive, at any rate, for some time to come. But this is far from being the case.

However, the assertions of those who at once rush into such statements as this, "that the Davy, Clanny, Mueseler, Stephenson, and other safety-lamps in universal use are, in the varying circumstances of a dangerous mine, quite unworthy of the name," are not at all warranted by the results of the said experiments. Nearly the whole question hinges on this part of the above quotation—"The varying circumstances of a dangerous mine"—as the experiments alluded to are conducted under conditions which do not obtain usually in mines, and it is a question fairly open to discussion whether these conditions ever occur in mines at all. If we take, as an illustration, the statement issued with Morison's patent safety-lamps, the following table gives the more important features there shown, and these particulars are quoted from the account of the Hetton Experiments, in the "Transactions of the Northern Mining Institute." We also append a copy of the Pelton Experiments:—

EXPERIMENTS AT HETTON.					
Lamp.	No. of Velocity of experiment.	Position of lamp.	Extinguished.	Duration of experiment, sec.	
Common Davy.....	1	11½	Perpendicular	.....	2
Morison, No. 1.....	2	15-25	ditto	.....	35-40
ditto.....	3	20-35	ditto	.....	2-11
ditto.....	4	27-35	Top from current	.....	1-5
Morison, No. 2.....	9	14-35	Perpendicular	.....	2-24
ditto.....	1	27	Top to current	.....	6
ditto.....	1	35	Top from current	.....	1
Call and Glover.....	1	27	Perpendicular	.....	2
Stephenson.....	1	27	ditto	.....	5

The lamps other than Morison's fired at the end of the time stated.

* In a fourth similar experiment the lamp kept burning at the end of 50 seconds.

EXPERIMENTS AT PELTON COLLIERY.					
No.	Lamp.	Position of lamp.	Velocity of current, ft. per sec.	Duration of experiment, seconds.	Remarks.
1.—Unknown.....	Perpendicular	.....	9	Fired.
2.—Mueseler.....	ditto	.....	9	.....
3.—Morison, No. 2.....	ditto	.....	9	.....
4.—ditto.....	ditto	.....	16½	.....
5.—Unknown.....	ditto	.....	11	Fired.
6.—Morison, No. 2.....	ditto	.....	11	.....
7.—ditto.....	ditto	.....	11	.....
8.—ditto.....	Top to current	.....	16	.....
9.—ditto.....	Top from current	.....	16	.....
10.—Mueseler.....	Perpendicular	.....	21	Fired.
11.—Morison, No. 2.....	ditto	.....	21	.....

It must be borne in mind that only a portion of those Hetton experiments are made with pit gas. In consequence of the difficulty of obtaining a sufficiently large quantity this gas was only used in the experiments with the Davy lamp. This is certainly a most unfortunate circumstance, and it goes far to reduce the value of the experiments, so far as the Stephenson lamp is concerned. However, taking the results shown in the table of the Hetton experiments, we have only one single trial with the Davy and Stephenson lamps, the speed of current being with the Davy 11½ feet per second, and with the Stephenson 27 feet per second. Now, it will hardly be contended that an explosive mixture moving at either of those rates will be often met with in mines. Taking first, 11½ ft. per second, or 690 ft. per minute, if we suppose this current to be moving through a district airway, 30 ft. in area, perhaps about an average, the quantity of air would be 20,700 cubic feet per minute, and the quantity of gas required to keep them up to the firing point about 3000 cubic feet per minute; and, with respect to the Stephenson, we have 27 ft. per second, or 1620 ft. per minute; and, taking a similar area as before, the quantity of air would be 48,600 cubic ft. per minute, and the quantity of gas required 6000 cubic feet per minute.

Newcastle-on-Tyne, Nov. 15.

M. E.

IMPROVEMENTS IN SAFETY-LAMPS.

SIR,—With reference to your remarks in last week's Journal upon my improvements in safety-lamps, for which I am much obliged, you will, I am sure, kindly allow me to offer some explanation bearing upon the subject of their similarity to lamps already invented. I do not claim originality in every point of their construction, and, in fact, I have taken for the basis of my improvements the lamps already known as Upton and Roberts', and Call and Glover's. But what I do claim is, that whereas both of these lamps in their original form exploded when subjected to a current of explosive mixture—in the case of the former lamp of 11 ft. per second, and in the latter of 8 ft. per second (the same as that at which the Davy, Mueseler, Clanny, and other similar lamps explode)—my modifications of these lamps will stand any current, even up to 35 ft. per second, without any danger of passing the flame.

In the No. 1, the patented improvements consist of an exterior protecting shield, a better and more simple arrangement, at the ingress of the air, one or more discs of wire gauze inserted in the hollow top, and a greater length of the cylinder of the lamp. In No. 2, of a chimney composed of two converging cone-shaped funnels of sheet-iron, brass, or other substance, and of an arrangement of washers on the wire gauze, or perforated metal discs at the top and bottom of the glass cylinders. In fact, in this lamp the only point in which it resembles Call and Glover's is the two glass cylinders, with the arrangement of shield, and those cylinders are employed for a different purpose from that mentioned by those inventors—the interception of the direct action of an explosive atmosphere upon the lamp.—Pelton Colliery, Nov. 19.

D. L. P. MORISON.

COMPRESSED AIR COAL-CUTTING MACHINES.

SIR,—In my letter of last week I intended to point out that the original patent for working coal by compressed air was the only substantial invention which had yet appeared of a practical nature, and that the proprietors of it were entitled to the sole merit of reducing coal cutting by machinery to a fact. I quite admit that since that date many parties have tried their hands at the work, and that some improvements have come out of those efforts, but that the original patent for cutting coal, to which I alluded, covers the ground, whether

the "slotting-machine" principle or the "pick," both being contained in one patent. There is no question that the trunk engine will work equally as well as the ordinary engine, so too will the link, oscillator, Cambrian, and every other workable engine, but none of the latter would supersede the original, and the patent cannot be evaded by substituting one for the other; this, however, is a matter between the patentees and those who use them.

Mr. James Grafton Jones (in the Journal of Nov. 9) states that he has made "very many machines which have stood the test." If this be so, he can surely tell the world where they are doing service. I cannot suppose that they have found their way to the scrap heap, after having stood the test. The fact I, however, suspect to be, that although his machine claimed to be for "turning corners" and "saving air," it neither does one nor the other, but that it is a questionable alteration, of little or no value. I will not trespass on your good nature by lengthening this letter. You have done excellent service to the cause, having for many years devoted much of your valuable space to coal cutting, which is now past the period of experiment, and must become a branch, and a most valuable one, and of great national interest; and, as a Leeds man, I feel proud that my native town has the honour of the invention.—Nov. 13.

OBSERVER.

P.S.—It seems to me that if the Ferndale Colliery had been worked by compressed air some of the lives which have been lost by the terrible accident might have been saved, as the stream of fresh air poured into the works must have been the means of sustaining many that have fallen.

RATING OF COLLIERIES.

SIR,—In the Glamorganshire district considerable dissatisfaction is felt with the mode in which the collieries are rated, and when the subject is carefully considered there certainly appears much ground for the complaint made. As there is no fixed basis upon which collieries are assessed in any of the coal-producing Unions, it has simply been provided that the assessment committee in each may appoint a person to value the collieries rateable to their Unions, but they leave the amount at which collieries should be rated to the peculiar views of the persons employed. Thus, whilst some take the tons of coal produced, and estimate it at 6d., 8d., or 10d. per ton, according to their caprice, others prefer to make the assessment upon the basis of elaborate calculations concerning the position and peculiarities of the collieries to be assessed; and it is very truly said that those who adopt the latter course assume in the question a technical fiction, known as a "hypothetical tenant," who is again assumed to pay without any effort at protesting, whatever sum it is considered desirable to extract from him. The law provides, it is said, that the "gross estimated rental" shall be what the colliery or "hereditament" shall let at from year to year. In the matter of a house, for instance, you are allowed a certain percentage from the amount of rent actually received for repairs, insurance, &c., which amounts are deducted from rent to obtain the gross estimated rental.

Now, it seems to me there ought to be no difficulty in the matter. The freeholder of the coal, of course, fixes the royalty to be paid to him for that coal at such a rate as shall return him the full value of his freehold therein (together with such additional amount as shall compensate him for not receiving the purchase money in ready cash) by the time the coal is worked out. The freeholder knows that his grant to work the coal is not of the nature of a lease, because he undertakes to sell the coal itself, as completely as a Manchester manufacturer sells a bale of cloth, and has no expectation of the coal reverting to him or his representatives at any future time, so that in making the assessment there is no reason that the freeholder has any pecuniary interest in the matter.

This reduces the question to one between the lessee or worker of the coal and the assessment committee (which is the representation of the ratepayers as a body). Now, there can be no doubt that the lessee takes good care in the making his bargain that he will not pay more as royalty than would be the fair rental for the property, so that the annual royalty of a coal mine is really much the same as the annual rent of a house; and, in assessing the colliery, royalty alone should be taken as the basis. But in the case of a colliery there should be no allowance for repairs, because it is as improper to assume repairs of the article to be sold as it would be to allow the tradesman for probable repairs in the bale of cloth. On the other hand, however, the machinery and plant necessary for getting the coal should be exempted from taxation, as they are simply the equivalents of the furniture of the house; and the necessity for this exemption is the more apparent when it is considered that every 1000% expended on machinery increases the rateable value of the colliery by increasing the amount paid as royalty, which is the rent. Again, the machinery forms no part of the freehold—it can be removed or sold without the consent of the freeholder, and should, therefore, be entirely at the disposal of the lessee. If a house be rated at 50l. per annum the introduction of half-a-dozen 50l. pianofortes would not justify an assessment committee in raising the rateable value to 350l.; and on the same principle the machinery introduced to suit the pleasure and convenience of the lessee should be equally exempt. Although no coal lessee or coal freeholder, and, therefore, not directly interested in a pecuniary sense, I think the question is one in which every inhabitant of a colliery district is indirectly concerned, as it not unfrequently happens that the collieries not only form the greater proportion of the rate-paying property, but also contribute the most to the creation of charges on the rates.

Newport, Nov. 20.

R. J.

THE COLLIERIES OF CAPE BRETON.

SIR,—After discussing briefly in your last week's Journal the merits of the International Coal Company, at Bridgeport, I resume my notice of Cape Breton's collieries in regular course, and will in that way take the Little Glace Bay Coal Company first. This company is presided over by a Mr. Archbold—Col. Archbold some people call him, but the rank is derived from the militia only. Let his position in the military service be what it may, he is a very good man of business, and his mine has, under his management, turned out one of the real prizes of the country. As a matter of course, the money to work it came from the United States, and the dividends accruing went thither. The coal of the Little Glace Coal Company is bituminous, as all coal found in Cape Breton is. The artificial harbour of the company is the best in the island, although I noticed the defect, as a matter of engineering and real importance, in the conception of it arising from the outer end of it being the widest, a fact which might have been apparent to the most ignorant in such matters. With a heavy sea on from without, a vessel coming into the harbour is more difficult to manage, as the narrowness of channel increases the force from behind is augmented, thus propelling the ship forward, and so greatly tending to endanger the safety of the craft. Notwithstanding this, there is now no artificial port in the country so secure. Dredging machines are kept pretty constantly at work, to keep the sand from accumulating and blocking up the harbour. In 1865 the profits of the company showed no less than 45 per cent. per annum. Such is the result of good management, and harmony among the shareholders.

Next comes the Block House Mine, at Cow Bay, another institution carried on with American funds and American enterprise. The coal of this company is in much request for gas in the cities of New York and Boston, and the spirit of enterprise shown by its manager, Mr. Robert Belloni, is worthy of all commendation; he is, indeed, one of the best men that ever visited Cape Breton, so far as doing good to the country while benefitting one's self is concerned. The shipments from the Block House Mine reach 100,000 tons a year. What the process costs the company I have no means of saying positively, but I know that their wharves have cost them a large sum of money, and that they are so situated that perfect security cannot be guaranteed at them. The freedom with which they expended their money, however, as well as the results they have attained, entitle them to the admiration of every one who thinks well of energy and pluck. I do not know what dividend Mr. Belloni may have paid his co-partners, but it ought to have been pretty liberal. This company have two screw colliers, the Pioneer and the Levant, in constant work between New York and Cow Bay during the open season; the average length of passage between these ports is five days. The freights to sailing vessels average some \$4, United States currency—say, about 12s. sterling per ton, more or less, according to the price of gold.

After the Block House Company comes the Gowrie Mine, in the same

locality—the non-euphonious Cow Bay. The Hon. Thomas D. Archibald, of North Sydney, is the leading spirit in this concern. He is a senator for life in the new dominion of Canada, a most worthy gentleman—few like him, indeed. His co-partners are mixed Nova Scotians and Americans. That he has got works in operation as perfect as any to be found anywhere is only saying the bare truth. What has been expended in making the loading wharf and break-water is a matter upon which I am not fully posted, but I am sure that the funds have been wisely and well laid out. Everything Mr. Archibald puts his hand to bears the stamp of the honest man, the judicious man, and the man of energy. The abolition of the Reciprocity Treaty with the United States has, however, affected the interests of the Gowrie Company, as it has those of every other company in the island, as well as those of the gas-makers and gas consumers of New York, Boston, and other cities of the Eastern States of the Union. The shipments of the company will not exceed 100,000 tons this year to all ports, I should imagine. Nevertheless, the prospect of an early resumption of reciprocity or, at all events, a considerable amount of reduction in the tariff upon coal next spring, in the United States is bright enough to cheer up Mr. Archibald and his friends in the meantime. They certainly have a good article, and abundance of it.

At Big Glace Bay there are two splendid collieries, not altogether in working condition; the old story of a bad harbour sticking them in the most effectual way for the nonce, but such energetic people as are engaged in the Caledonian and Clyde Mines are not to be beaten. Both are in the hands of Americans; but Mr. Poole, who is the manager in charge of the Caledonian Company, is a British subject, and he is making the most thorough preparations to be ready for the harbour now in course of construction. This harbour is being made under contract for both companies, by Mr. A. McBean, C.E., who certainly is doing solid, enduring work, at a cost of about 20,000£. to 30,000£, I should say. My only doubt about the matter is with reference to the moving sand in the Bay, which each gale of wind must cause to block up the channel more or less. Then the distance the work has to be carried out into the Bay makes me tremble that the effort may become abortive. I hope not most sincerely; and I am sure that if anything can be done to make it efficient and useful, the harbour of Big Glace Bay will be made so under the superintendence of my friends Messrs. Poole, McKeen, and McBean. Granted that the harbour answers the expectations of its projectors, then I have no hesitation in saying that the coal shipped from Cape Breton will be greatly augmented by the exports from Big Glace Bay. Most certainly both Clyde and Caledonia men have immense quantities of admirable coal, but hitherto expense has been the great item, enough to try the stamina of the boldest and staunchest. However, *fortune favet fortibus*, is the motto of such plucky people as are engaged in the Caledonia Mine, any way, and I am sure that if the spirited manager of the Clyde Company were allowed his way he would emulate the exertions of Mr. Poole.

There is a coal mine being worked at Big Pond, but with what result the writer knoweth not. Mira Bay boasts of one of the finest dormant properties in the whole island, but owing to some incomprehensible timidity upon the part of capitalists nothing more has been done than the development of its immense advantages—advantages peculiar to itself in the island, and concerning which I can authoritatively speak to any of your readers who really want to make money in heaps. I have been on the spot, have been in the pit, have burnt the coal, and, indeed, I know all about it.

At Little Bras d'Or there are two exceedingly valuable mines, one of which is in operation, and has advantages of its own hard to beat. I know few chances like the chance of getting hold of this property. It is for sale, for want of money to work it, being in the hands of an individual who is not a position to carry it on by himself. Port Hood and Mabou are also rich in coal. I shall write you about Nova Scotia next week.—Nov. 20. VIATOR.

CANADA GOLD AND OTHER MINES.

SIR,—Seeing no reports of Canada mines—lead, copper, silver, or gold—among the other world-wide information in your Journal, I am enlivened with a pleasing idea that an occasional letter (say, about monthly) from me, giving latest and truest attainable intelligence, may be useful in Britain, and wherever else the *Mining Journal* is read. About the middle of this month (November) I shall reach the Madoc gold district, in the eastern section of Ontario province, and soon after may be at the Gilbert River and Chaudiere Mines, in Quebec province—that is, if snow does not cover the county too soon. I name this intended journey to add that you may expect from me a reliable description of the condition of the experiments which may be in progress when I am there. I am not personally interested in any mine, but, as a writer for newspapers and author of books, am favoured by the Government authorities with early copies of official information. A concise narrative of all that has been done in the Canada gold fields this year, or since they first excited expectation and adventure, and rewarded adventurers, might be interesting, but it cannot be done by this mail. This brief letter will be confined to a few items of latest developments.

The Barry Mine, at Madoc, is owned chiefly by shareholders residing in the town of Port Hope, north shore of Lake Ontario. They have sunk a shaft, and at the depth of 25 ft. have struck a quartz vein in which gold is visible to the naked eye, and richly visible. On assay (Oct. 31, 1867) this quartz yielded at the rate of \$500 per ton, or 100£ sterling. This statement rests on the authority of interested parties, and may be inexact. I shall endeavour to sift its truth from its possible chaff when I reach Madoc.

The Victoria Gold Mining Company consists chiefly of Toronto men. They, by their agents, are operating in Madoc, which lies 150 miles east of Toronto. They are applying to the Dominion Parliament, which met for the first time on Nov. 6, for a charter of incorporation, and promise to put the Madoc territory largely, earnestly, to the test. They have acquired 90 acres near the centre of Madoc township, a township is 36 miles square, which is declared by Dr. Otway (an "expert," who had acquired, it is said, an extensive knowledge of metallurgy before arriving in Canada) to be decidedly auriferous and rich. The company expect to have a shaft sunk and crushing-mill erected before hard frosts set in, so that the mine may be worked all the winter.

The shafts in process of being sunk in a district of about 50 miles from east to west, by 20 from south to north, and of which Madoc township is on the central south limit, are estimated to be 600, 800, 1000, 1200, or 1500. You may demand, why this discrepancy of estimate? It arises from much of the country being thickly wooded, and undulating in surface, with roads widely apart. Some people who reckon the workings keep to the roads, others penetrate the forest thickets. It is a rough, rocky country, in which agriculturists have not made more than partial clearances. A considerable village of frame houses has arisen near the centre of Madoc township, to which the Spanish name of El Dorado has been given. On a ridge of what is called the Moor Farm, shafts have been sunk, and gold and silver obtained within the last three weeks to an amount which, if the companies interested report truly, is prophetic of wonderful wealth. Of these are the—El Dorado and the Kotanney Mines (pardon the English article and Spanish article *El* running into confusion, the colloquial language of the woods is independent of grammar, especially of Spanish). A Toronto association, named the Madoc Gold Mining Company, have a shaft in this vicinity, and have just made a fortunate strike. Other companies working in the same locality are—the Royal Canadian, Excelsior, Brantford, Goderich, and Wilcox; all their shafts looking well. The Royal Canadian is 25 feet deep, and has struck a vein of quartz 4 feet wide; a few days ago rock was brought up from this vein which showed gold largely to the naked eye. A Belleville company of shareholders (Belleville is the county town of Hastings, in which these mines are located, and the names of companies are in most cases given from the towns where the adventurers first associated) are sinking near the Richardson Mine, the earliest opened and most successfully tested, and are showing specimens which seem to indicate a mine of real wealth.

Near the Belleville is the shaft of a Montreal company, called the Anglo-Saxon. Mr. White, their manager, reports a successful strike. Numerous crushing-mills are being erected. The Richardson Mine, in which the first of the Madoc gold was discovered, just 12 months ago, when a prospecting individual was looking for copper, is true to the expectations founded on it. That prospector was Mr. Carr, of

Boston, United States. He purchased conditionally from Mr. Richardson, owner of the farm, tried to raise capital by forming a company in Boston, but failed to come to time. Meanwhile certain speculators of Chicago City, State of Illinois, returned Californians, heard of it, and tickled Mr. Richardson with larger handfuls of greenbacks than Mr. Carr could obtain within the specified time. Each party, including Richardson, tried to make the best of a contract not legally specified and signed. They got to litigation in the Canada Court of Chancery and the case was not decided until August of this year. In the season of uncertainty the construction of stamping-mills, and other requisite buildings and machinery, was postponed. And others who had acquired land for mining purposes in the district did not venture upon costly machinery until they saw how the Richardson Mine was developed, and thus it is that so much time—nearly a year—has been allowed to pass, while comparatively little real work has been accomplished. That uncertainty is ended. Energy and science, mechanical and chemical, are now penetrating the rocks in hundreds of places; building mill structures, erecting stamping-mills, and laboratories. Within the last few days some of the best specimens hitherto yielded by the Richardson Mine have been found. From one panful of sand, in a "pocket" of the rock which has recently been broached, 3 ozs. of gold were taken. Mr. Harding, the manager, is sinking another shaft near the Richardson, which at the depth of 15 feet is yielding gold as abundantly as the shaft No. 1.

Capital and experienced miners are wanted. The arrival of money and men, strictly applicable to the development of the Madoc mineral treasures, would meet welcome and reward. I venture to write this, being well assured that the gold and silver ores abound in that territory, although I have not thought it prudent to quote in figures the marvellous amounts of treasure reported as found by some of the companies; some are, doubtless, exaggerated. I shall endeavour on the spot to get at the truth. ALEXANDER SOMERVILLE, Hamilton, Canada, Nov. 7. The "Whistler at the Plough."

MINES AND MINERALS OF NOVA SCOTIA.

SIR,—Under the above heading a letter from J. Tennant, jun., mineralogist, appears in the Journal of Oct. 19, stating that here experienced miners are able to earn from \$2 to \$3 a day. This is a mistake; a man may earn that amount, *en gros*, for the country (the aggregate produce of gold gives \$2 to \$3, in some districts, per man), but the daily wages average \$1.25, or 6s. sterling. I have the returns of some 40 companies before me, and, therefore, speak from authority.

THE AUTHOR OF

"A GUIDE TO THE GOLD FIELDS OF NOVA SCOTIA," Halifax (N.S.), Nov. 7.

FIRST DISCOVERY OF GOLD IN AUSTRALIA.

SIR,—I am quite sure that there exists much misapprehension concerning the discovery of gold in Australia; and as that discovery has exercised so important an influence, not only upon the colony but upon the empire, and as it is another proof of the marvellous effect which mines and mining produce upon commerce and civilisation, it will be interesting to your readers if I mention, for the first time, what really occurred. It is pretty well known now that the discovery of gold in California and in Colorado was a matter of accident; and such was also the case in Australia; and I believe, Mr. Editor, that no clear, simple, and consistent account of the discovery of gold in Australia has ever been given to the public. Gold was found in Australia long before the fact was published in Europe. Nearly forty years have elapsed since the original discovery. This may seem very improbable to some of your readers, but the fact is beyond controversy. In 1829 gold was first found on what we may properly call the Australian continent. An English gentleman residing at Sydney, who built the first store at the head of the navigation of Hunter's River, or, at all events, was one of a firm of merchants who did so, was the occasion of this great discovery. These gentlemen founded the town of Morpeth, and supplied the up-country settlers with stores, taking in exchange their produce. Mr. Barwise was a prominent member of the company, and being a man of geological and mineralogical science, he busied himself in developing the resources of the country, in connection with a few other scientific gentlemen—such as Mr. Rumber, the astronomer of Paramatta; Mr. Cunningham, the botanist; Mr. Hallen, Government engineer; Mr. Thompson of the Surveyor-General's office; Mr. Earl the artist, from whose panoramic pictures the public were supplied for many years by the copies made from his drawings, which were exhibited by Messrs. Burford, of Leicester-square. There were some other men of equal standing with those parts I am not equally acquainted, but they all worked together for the sake of their adopted country, and Australia will for ever be indebted to these pioneers of science for her prosperity and power. The *conversations* held in George-street, Sydney, by these able and learned men, have had an influence not only upon the progress of that city, but also upon that of the vast country on which it is but a speck. At one of these meetings a gentleman of great ability, but of retiring manners, Dr. Little, was introduced by Mr. Cunningham. Dr. Little had previously been on an exploring tour for the purpose of informing himself, as far as possible, of the geological character of the country. He had made a journey into the Blue Mountain range, in a north-westerly direction from Paterson Plains, and, amongst other discoveries, found evidence of volcanic activity in that region of no very remote period. On Dr. Little's return to Sydney he gave the public the benefit of his labours. He obtained the fate of all other explorers and discoverers—he was attacked in the newspapers. The *Sidney Gazette* opened a heavy fire upon the learned explorer. His science was stupidly questioned, and the facts which he revealed, and which were true, were audaciously denied. Soon after, however, another gentleman had the opportunity and the happiness of vindicating the learned explorer. Mr. Barwise, of Sydney, had gone on a journey to Wallis's plains, and he intended, upon his return, to travel in a north-westerly direction, in quest of water, so necessary to Australian pastures. At that time there was severe drought, it being the third dry season which the shepherds had experienced. As the place described by Dr. Little could not be far off the track which Mr. Barwise pursued, he determined to explore it. Soon after the opening of 1829 he fitted out a small expedition with drays to carry instruments, tools, stores, tents, and such other things as were requisite for a journey into the wilderness. The expedition started, taking a direct course towards Dr. Little's volcanic mountain, which in due time was found and examined; and specimens of cinder, pumice, and scoria, enough to vindicate the Doctor's veracity, were collected and packed on one of the drays. From this point a more northerly course was taken, when ironstone, and carbonate of copper, were met with, of great apparent richness. On the fifth morning after leaving Dr. Little's mountain, while the men were striking tents, the chief teamster, James Ryan, requested Mr. Barwise to go with him and examine some yellow metal which he had found while looking for the oxen in the morning. He had marked all the trees in his route from the spot to the little encampment. The track of the "blazed" or marked trees was followed until the spot where the singular deposit of yellow metal had been found was arrived at. The place was a water-worn, basin-like hollow in a rock, which contained a quantity of yellow metal, glistening in the sun. Ryan had previously taken a little of it in his hand, but returned it to its former position. "What is it, Master?" asked the teamster. "I do not know," was the reply; "but in any event we will take some of it with us." Not having anything to put it in, what was to be done? Mr. Barwise pulled off his jacket and shirt, and with his knife cut off the back and tail of the latter, forming it into a double fold, and put a quantity of the bright metal into it. Then the party retraced their steps to the encampment. This occurred in February, 1829, a few miles from the south bank of the Peel River. After two months the party arrived in Sydney. Mr. Barwise called together such persons as were likely to take an interest in such matters, and showed them the evidences which confirmed the alleged discoveries of Dr. Little. He also produced the samples of ironstone, copper ore, &c., reserving the gold for the last revelation of the events of his journey. After relating the adventure of Ryan, the teamster, he poured out the gold, and invited the company to inform him what they thought it was. Incredulity is as common, and perhaps as mischievous, as credulity; and, of course, none of those gentlemen would for a moment entertain the idea that the shining metal was gold. Mr. Rumber, in-

deed, condescended to assure the company that it was not mica, nor copper, but that it certainly was not gold. Indeed, it was unanimously agreed by this scientific little circle that Bedlam, or the Paramatta Lunatic Asylum, would be a very suitable place for any one that asserted the metal was gold. After much discussion it was placed on one side, and soon diminished, as every visitor had a piece of it for the gratification of his curiosity, or its more minute examination. The fact was that a wide-spread desire existed among the sheep farmers to put down any reports of gold discoveries. They declared that persons raising such reports ought to be put in confinement, as if the shepherds heard that gold was to be found in the mountains they would all run away in search of it, and every sheep farmer in the country would be ruined.

In 1852 Mr. Hargraves obtained from Government the reward of 20,000£, as the original discoverer of gold in Australia. At that time the true discoverers were in California. Long years before 1852 Ryan, the teamster, found the first gold, and Mr. Barwise introduced it to the notice of scientific men in Sydney. The Government never pays twice, and it is not likely that Ryan or his master will receive any official acknowledgment of their service, but it is proper to state the facts, and the public will peruse them with interest. CIVIS.

THE SLATE TRADE OF NORTH WALES.

SIR,—I have read with great satisfaction the many letters published in your valuable Journal, on the Slate Trade of North Wales, written by Mr. Kellow, of Tremadoc. Although he is almost an entire stranger to me, I perceive that he has an extensive knowledge of quarrying, &c., and I fully endorse the sentiments which he so clearly expressed. I have learnt, during an experience of more than 40 years, both as quarryman and manager, that any other than a practical man, with a good share of brains, could not have so ably treated the several points referred to in his letters; and it is to be hoped that quarry owners and others will profit by the information and counsel which they contain. Had we a few more such men, who could find time to give this subject the attention that it deserves, and would come forward fearlessly to introduce and ventilate quarry enterprise and its management (*practically*), through the medium of the *Mining Journal*, cunning impostors and scheming pretenders would soon find it more difficult to carry on their unholy work, and the hidden wealth of the Principality would be operated on in a manner that would make it permanently lucrative. R. WILLIAMS, Brynnygwyn Quarry, Nov. 19. Quarry manager.

DRILLING-MACHINES.

SIR,—Fully endorsing your remarks in last week's Journal, as every one at all interested in mining must do, that as a proper number of well-trained, experienced workmen cannot be obtained, we should seek about for means to remedy this by supplementing the good miners who are left to us with machines which shall relieve them from their heaviest toils, I am induced to ask what has become of General Haupt's drill? It appears to me that if there really be what is represented in this machine, a more opportune time can never occur for its development. In a letter in the Journal a few weeks since his agents promised that it should shortly be tested underground. May I ask of those gentlemen if this consummation, devoutly to be wished, is likely to be accomplished, and when?

Again, Sir, in last week's Journal a description is given of a Tunnelling Machine invented by Mr. Brunton. May I suggest that, in the cause of mining and miners, how desirable it would be were Mr. Brunton to communicate a full description of this machine to the Journal, as to its capabilities, room required, whether driven by steam or air, if suitable for shafts equally with tunnelling, and, finally, its cost? I think this subject cannot be too thoroughly and, at the same time, too expeditiously ventilated, for "while the grass grows"—you know the context; and I may also add that if, instead of paragraphs finding their way into local newspapers, all that appertains to this important subject were contributed by the promoters direct to the *Mining Journal* how much more publicity in the right channel would be secured, and how much more readily it would lead to the ultimate benefit not only of the inventor, but of the whole mining world. Brighton, Nov. 18. BORER.

ASCENDING DEEP MINES—IMPROVEMENT.

SIR,—It appears as if the interest of the labouring miner is almost lost sight of, so far as making his labour and fatigue as easy and agreeable as possible; but there is one thing I am desirous of bringing before the mining public, if you will afford me space in your valuable Journal.

It is allowed by all parties that the most fatiguing and most injurious part of the labouring miners' duties is the ascending from deep mines after having performed their labour, where they exhaust a great portion of their strength, which renders them the less able to meet the heavy task of climbing; and, as the generally of Cornish mines are not in a position to erect suitable machinery for that purpose, it becomes the duty of everyone who can invent anything in the way of an auxiliary to do so, carrying out any plan or invention to ease the heavy task that has been so injurious to our worthy but neglected miners.

I now wish to call the attention of managers and agents of mines, and of all whom it may concern, to what I call an improvement which might be made in footways or ladder-roads, by reducing the length of the step from 10 or 12 in. to 7 or 8 in., which I think would be a great relief, inasmuch as it would cause the ascent to be a little slower, and not so much strain to the muscles. This is easily proved when ascending by a flight of steps. If the risers were 6 or 7 in. it is easily performed; but if the steps were 10 or 12 in. above each other it would be found to be a very laborious performance. The same will apply to itself to the miner when climbing mine ladders. A man can carry a heavy load over a flight of stairs where the step is 6 or 7 in.; but, if the same height was gained by steps of 9 or 10 in., it would be found to be impossible to ascend with the same load. And, if easier to ascend with a load, does it not stand to reason that it is easier to ascend if not laden? It may appear difficult at first to get out of the long-accustomed step but that would soon be admirably mastered, and I think highly approved of. It is so inexpensive for trial that I think no one can complain of the cost. It may at first be tried in a winze, or in any place on a small scale for the first trial, and then it must be proved by unprejudiced minds. Let it be tested by old men; and, if so, I am convinced it will be highly approved of; and, if carried into practice, my belief is that it will add years to the life of the miner. The ancients had their ladders 15 in. from step to step, and at all times when the distance has been reduced it has had a good effect; and I think if my suggestion be carried out it will be found to be a great boon to the miner. I now wish some one to make the trial, and an able penman than myself to advocate it. Dec. 12. A LABOURING MINER.

MINING INTERESTS IN DEVON AND CORNWALL.

SIR,—My last communication has had a twofold effect—first, of eliciting encouraging replies, which go to show that the interest in mines is not dead but sleeping; and, secondly, that elsewhere, as in Devon and Cornwall, additional information is desired. The desired information is of the features of eligible new mining ground, of locality, and of the certainty that any such new mining ground remains unappropriated and undeveloped in Devon and Cornwall. The encouragement is in the form of a reiteration of the statements that the depression in mining property and products must shortly cease; that mining property, skillfully selected and worked, forms a safe and highly remunerative investment for capital; and that under a spirited and inexpensive working of new ground the revival of mining industry may actually precede an advance in the market price of copper, tin, and lead. That this last anticipation may not be hastily questioned, it should be remarked that, with varying conditions of production, the same market price of metals may yield three classes of returns—an unremunerative and ruinous class, as in those mines where water exists in great quantities; a barely profitable class, as in those mines which were opened with much needless outlay; and, last, a class that literally may coin money, as in the new mining ground workings recommended by me on hill sides where practicable, which would admit of draining without pumps or engines. Mr. Ricardo, it will be remembered, pointed out something of this sort about wheat-growing lands—the best soils not only producing the heaviest crops, but the poorer soils barely admitting of profitable cultivation, unless in seasons of high prices. Of course, wheat lands and mines are radically unlike, but, as the French, economist, Bastiat, would have said, profit is the relation that effort bears to result. Given a certain price for copper, tin, or lead, the return, or profit, will be in proportion to the working charge. A mine without pumping, or with no considerable accumulation of water, to be kept down by pumping, resembles a ship in ballast trim, or business premises held on lease at an easy rental; while a mine with much water is a water-logged ship, or it is a Regent-street shop, for which twice the sum of a fair charge is paid annually. Thus there may be, and is, no occasion to wait until the market prices of metals rise. On the contrary, the prices should be taken as they are—as indicative of an altered state of things, to which it is the part of wisdom to conform. The age, indeed, is one of cheapness, and it should be time enough for Devon and Cornwall to fold their arms and remain idle, when, some centuries hence, their accessible, cheaply got at, and cheaply raised metals exhibit unmistakable symptoms of falling.

That Devon and Cornwall abound—still abound—in metals, which practically are as accessible as when the Romans found them, is not a sentiment, not an opinion—it is a fact there is no gaining, a geological certainty as absolute as that there is coal in Durham. There are the rock formations to be traced;

there are the lodes of valuable mines to be intersected, to the east or the west; there are the surface formations, inviting proof by dry level adits. And collectively from these signs there is the logical conclusion that all the wealth which has been gleaned from the bowels of Devon and Cornwall is as nothing when compared with the wealth which may be discovered in the future. Here, for instance, it is not the discovery of new treasure, but the discovery of old treasure, for it is but the key to the discovery of old treasure. Here, for instance, it is not the discovery of new treasure, but the discovery of old treasure, for it is but the key to the discovery of old treasure. Here, for instance, it is not the discovery of new treasure, but the discovery of old treasure, for it is but the key to the discovery of old treasure.

With, on the one hand, such certainty in mining, and on the other hand with the distress prevailing among the mining population of Devon and Cornwall, it is earnestly to be hoped that the sleeping interest in mining will shortly be aroused. The enterprising and the rich should stand forward to furnish and employ the considerable working capital, that while robbing earth of its abundance, would chase gloom and want from many firesides. Nor may the appeal be withheld from the great centres of moneyed capital in town and country. The Bank of England, the joint-stock banks, and the country banks, have overflowing tills, and vaults that at no previous time were so gorged with notes and coin. That superabundance lacks the employment which, in part, may be found in the new mining ground of Devon and Cornwall; and who will say that a present liberal production of cheap copper, tin, and lead, and in accordance with the country at large a better share of the machinery and other manufacturing orders from abroad than is now obtained?

CHARLES THOMAS,
Great St. Helens, Nov. 20.

TICKETING EXPENSES.

SIR.—It is quite clear that no alteration, save that embodied in Mr. F. Pryor's resolution, will have the result desired by the miner—the thorough abolition of all indirect taxes on the mines. The samplers still receive their weighing and sampling fees; and a great number who, with other intruders, have no kind of business other than that they once were agents of a copper company, persist in dining at the expense of the mines, although, no doubt, unknown to their late employers. There is one alteration left before calling upon Mr. Pryor to renew his resolution, which is—that no miner be allowed to attend the ticketing, except the Chairman, as is the case in Swansea. What, I would ask, is the use of it? Does the copper ore bring a farthing more? Certainly not—the contrary, a day is thrown away from the mines, expenses per train, &c., if from the eastern district, and for no kind of purpose, except in many respects (if thoroughly investigated), to the prejudice of their employers.

Cumbe, Nov. 18.

A MINE ADVENTURER.

DYFNGWYD MINES COMPANY.

SIR.—Your columns have teemed so much with the unfortunate management of this concern that, perhaps, it will be a treat now to your readers to follow the game to the death. You will remember that a few months ago the indignation of a few independent shareholders was aroused at a meeting, and that a committee of investigation was appointed. You will also remember that before the time fixed for the presentation of the report of this new body, the finance committee called a special meeting of shareholders to consider the propriety of registering the company under the Companies Act, 1862; and simultaneously to pass resolutions to wind the company up voluntarily; and to appoint a liquidator. I will pass unnoticed the annoyance of the committee of investigation, and of all right-thinking men, at the attempt thus ineffectually to burke and smother the expectant report, because the finance committee were sufficiently rebuked for this breach of faith at the time. However, Mr. George Hadley, the purser of the company, was appointed liquidator under the winding-up, which was carried, in spite of protests, to be entirely voluntary. Nearly the first act of this official was to invite tenders for the mines and materials; but, as the result of the Rhosyddol sale, under the same management, was yet fresh in memory, the intervention of shareholders put a stop to this proceeding. At the same time was the attempt, last Tuesday, to sell the mines and materials by auction, and yet reserving a right to one bidding, to put in a reserve at a price which would have been the whole thing. This reserve was very properly called for to be in the auctioneer's hands before the bidding commenced. To make the affair most attractive, Mr. Buckland, the auctioneer, had two mines to sell—Mount Gabriel, held for the unexpired term of 18 years, at 1-18th royalty, reducible, too, by allowances for cost of conveyance of ore to port, and of shipment of its ores; and, then, Dyfngwyd, held at 20s. per ton royalty, about 1-12th, and without any allowances. Now, Mount Gabriel was put up first with a like reserve of one bidding, and yet that mine, and all its machinery, was actually sold at 1157, (which, of course, was above the reserve), while Dyfngwyd, held on the same terms, was put up with a *bona fide* bidding of 3000, and a second sale at 1000; yet the auctioneer, failing to get more, gave up the sale, announcing that the biddings were below the reserve. If afterwards transpired that the reserve was 22500.

Now, what is to be the next move on the board? I am only a common pawn, and cannot expect to checkmate knights and other heavier pieces; but, Sir, I should like to know how it is that a liquidator under a voluntary winding-up can venture to exercise such powers in the absence of any special instructions (see under Sec. 161) by those who appointed him? Although a comparative certainty, I know enough to say that without such special instructions it is certainly beyond the provisions of the Companies Act, 1862 and 1867. These extrajudicial Acts will only tend to keep this mismanagement concern longer before the public gaze, unless some one steps in to compel the liquidator to put the mine up for public auction, without the hocus pocus of any reserve; and, if he is too obstinate, and wants to cling yet to the opportunity of serving the old regime, why, then, let us ask his honour, the Master of the Rolls, to make the liquidator conclude, or, at least, under the supervision of the Court. Plenty of evidence will be forthcoming to support the petition, and funds too.

London, Nov. 21.

A VIGILANT SHAREHOLDER.

WEST CARADON MINING COMPANY.

SIR.—I perceive among the correspondence in last week's Journal a letter purporting to have been written from an old shareholder in this mine; in answer to which I would remark, had your correspondent been acquainted with the Caradon district he would have shown more discretion in keeping his remarks to himself than by sending them to the readers of the Journal. He states that the courses of ore which have given all the profits to the shareholders were from the shallow levels above the 36, and from Menadue and Gilpin's lodes, &c. I grant that these levels have been very productive, but he must also acknowledge that they are extended to the extremity of the adit. Does he wish the lack of those levels extended to the Moon in search of minerals? If so, he will find himself hopelessly disappointed in his results. And has he forgotten the rich courses of ore on Vivian's, Jope's, and several other lodes, which gave very large profits below the 36; also that the principal part of the returns for some years past, if I read correctly the agents' reports, has been from the bottom or deep levels of this mine. Captain Johns, at the meeting, referred to their prospects as regards the deep levels. In reading Mr. Watson's remarks the writer will see that in South Caradon they have a course of ore within a few fathoms of the boundary of the west, and as well inclining or dipping upwards, which will not only lengthen the course of ore in depth at this mine, but speaks volumes for its again becoming a profitable and lasting mine, and bears out Captain Johns' statement. The western ground has hitherto been undeveloped; and, with a vigorous prosecution, I think the agents will agree with me that they see no reason why they should not here have profitable courses of ore, both shallow and in depth, as on the other parallel explored lodes. If depth is not required to make profitable and lasting mines I cannot agree with your correspondent that we shall find them at the surface. As regards the management, does it argue because a manager is successful he is the most practical miner? Common sense should teach him better.

A LOVER OF FAIR PLAY.

MELANCHOLY ACCIDENT.—A most distressing loss of life occurred at the Deep Level Mine, near Halkyn, on Tuesday last. Two miners were working in a rise over the back of the deep level, or adit, and had got up in the vein, which was filled with stiff clay and sand, about 7 or 8 yards. Two miners were at the same time working in the end of the adit level, which was advanced 20 yards beyond the rise. The whole four men, as far as can be ascertained, were drowned almost simultaneously. It appears that the men in the rise broke up suddenly into a cavity, from which a volume of water poured out, washing down the men, and a large quantity of stiff clay, into the level below. This clay filled the level for nearly 20 yards in length, or formed a dam, as it were, to the water, closing in the poor men behind it. It is understood that two of the men have left widows and several children behind them, and a subscription for their relief has been opened amongst the shareholders.

WEST DRAKE WALLS MINE (Calstock).—On Tuesday, the 40-in. cylinder pumping engine, just erected at this very promising young mine, was put to work by Mr. M. Loam, the engineer, in presence of many large shareholders and friends, the engine taking its first stroke very easily and gracefully; and on the water appearing at the head of the lift the air rang with the deafening roar of the miners, who congregated in great numbers to witness such a gratifying event in these depressed days of mining. The engine, which is almost new, is of sufficient power to develop the mine to a great depth, and the engine-house is beautifully designed, well built, and large enough to take an engine of twice the power. Those who have seen the engine and house have "One and All," pronounced it to be a credit to the company. After witnessing the starting, the gentlemen adjourned to the Drake Walls Mine account-house, where a good substantial dinner was provided. Amongst those present were Messrs. B. Clogg (purser), J. C. Isaac, A. C. Glubb, H. Canner, M. Loam, Hambly, T. Nichols, J. M. Sellers, Ware, Coath, Capt. Gregory (manager), Hoskin, Parsons, J. Gifford (manager of Prince of Wales, West Prince of Wales, &c.), W. Gifford, S. Gifford, G. Rowe, G. Rowe, jun., and others. After dinner Mr. Loam (president) proposed "Success to West Drake Walls," "Success to Prince of Wales and neighbouring mines," &c. Capt. Gregory, Gifford, and Rowe, in responding, spoke very confidently of the prospect of success in West Drake Walls. The directors very generously provided a dinner for all the mechanics engaged on the mine, who all quietly separated at an early hour, evidently well pleased with their employer's liberality.

ARE QUARRIES MINES?—Vice-Chancellor Malins had before him a disputed will case, in which a codicil to Lord William Powlett's (the Duke of Cleveland) will had to be interpreted. The codicil said: "I bequeath all shares, securities, or interests in railways and mines of which I shall die possessed to my wife, Lady William Powlett absolutely, in addition to any other bequests in her favour in my said will or any codicil thereto." The question was whether

this bequest included shares in the Welsh Slate Company. It was contended on the part of the plaintiff that the quarry had been worked for the last eight years underground, and had then become a mine; while, on the other hand, it was shown that the property was rated as a quarry up to 1866; whereas, if it had been considered a mine, it would have been exempt from rating. The Vice-Chancellor said that the only thing to distinguish a mine from a quarry was the mode of working. This one was worked as a mine, and, therefore, it would go to the plaintiff.

BWLCH-Y-PLYM LEAD MINING COMPANY.—The Master of the Rolls on Wednesday gave judgment in this case, which was an application to wind-up the above company, mainly on the ground, among other allegations, that shares had been given to some parties connected with the company to lend the weight of their name to the concern, but in other respects without any tangible payment on the shares. The Court, in refusing to grant the winding-up order asked for, said that some of the allegations put forth might be sufficient, if established, to relieve a part of the now dissentient shareholders from their shares, if they applied in time, but no case had been made out on the evidence to induce the Court to wind-up such a company as the present, more especially where the great body of the proprietors of its shares wished to go on.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

GOGINAN AND PLYNIMON DISTRICT.—Much has of late been said about the dividend mines in this district, and rightly so, but I fancy something should be told regarding the young ones as well. There are several of these being opened on the richest lodes in this mining field, some of which I have examined, and found most of the veins to be well-defined, of good character, with beautiful gossan, lead, and blende, which must be considered encouraging so near the surface, and one I think more particularly deserving attention. It is situated about two miles north of Ponterwyd, Aberystwyth, designated Dinas. An adit level is driving on the course of the lode from the bank of the River Rheidol, and judging from the splendid gossan, lead, and blende brought to surface, I believe it will be a good mine. It is being worked by a local party, and I hear will soon be offered to the public. This is quite a new piece of mineral ground, with three lodes discovered.

OKEL TOR.—This mine has very much improved of late, not only in consequence of the north lode in the western part being communicated with the south lode in the eastern part, thereby utilising that remarkable lode, but by the discovery of other lodes, which together will not only tend to increase the samplings, but also to raise the average quality of the ore.

GREAT SOUTH CHIVERTON is rapidly improving, and the samples of ore sent to the office, 2, Bucklersbury, are decidedly superior to anything seen before in the mine. It appears to be only a question of time with this property. The shaft is now down about 60 fathoms, and from appearances there is little doubt but a good lode will be found in a little more sinking. A second West Chiverton is likely to be found here.

LOVELL CONSOLS is rapidly improving, and the agents anticipate meeting with a very productive lode in a few weeks. There is no doubt but that this property will soon pay handsome dividends. There is no reason why this mine should not equal the Old Wheel Lovell, or Trumpet Consols, as all the lodes from which these two mines returned their profits pass through the sett.

OLD WESTMINSTER.—The improvements here within the last three or four days have been very considerable, with marked indications of improvement; and a shaft driven out from it east is getting into good and profitable ore ground. The 92 adit improves, and the eastern shaft (Carpenter's) having drained itself, is going down in very favourable ground. The prospects of the mine have been wonderfully improved in the short space of three months.

ROSE AND CHIVERTON.—Intelligence of a most import character has been received this week concerning this property. It appears that No. 2 lode, referred to very pointedly at the meeting of shareholders, has much improved—sufficiently so, it seems, to justify a telegram being sent with the announcement that it is now looking "splendid." No further comment is necessary.

WEST MARIA AND PORTSCUE MINES are opening out splendidly on the Capel Tor and West Maria lodes; the mines are now being sunk from the 50 to the 60 fathom levels, which, when completed, will enable extra stopes to be let, this will greatly increase the present returns. The coming sampling will exceed 200 tons, and from the great reserves the same will be gradually increased, and there can be no question the adventurers will be rewarded by a good paying mine.

FRANK MILLS sampled 100 tons of silver-lead ore on Nov. 14. The agents' report, which was received too late for insertion, records no alteration worthy of notice.

CRENVER AND WHEEL ABRAHAM MINES, materials, and machinery, which were bought in the other day, when offered for sale by auction, have been disposed of this week to Messrs. Williams, Williams, and Co., bankers, Truro, for \$5000.

NEW CHIVERTON CONSOLS.—A company with this title has just been formed to work a valuable piece of ground in the vicinity of West Chiverton. It is stated that a sampling of ore will shortly be made.

MID-WALES LEAD.—Information has been received that the discovery referred to some weeks since continues to hold good, and the lodes are producing one of a satisfactory character.

COPPER AND BRASS.—The total weight of the copper and brass exported from the United Kingdom in September was 72,224 cwts., as compared with 59,070 cwts. in September, 1866, and 61,863 cwts. in September, 1865. In this total copper figured for 54,269 cwts., as compared with 44,871 cwts. in September, 1866, and 41,532 cwts. in the month of September, 1865. The total exports of copper and brass to September 30 of this year amounted to 556,938 cwts., as compared with 472,560 cwts. in the first nine months of 1866, and 512,446 cwts. in the first nine months of 1865. In these totals copper figured for 392,490 cwts., as compared with 328,497 cwts. to the corresponding date of 1866, and 382,563 cwts. to the corresponding date of 1865. British India appears to be a large consumer of our copper, having taken 206,336 cwts. to Sept. 30 this year, as compared with 143,936 cwts. to the corresponding date of 1866, and 143,393 cwts. to the corresponding date of 1865. The value of the copper and brass exported in the first nine months of this year was 2,296,271, as compared with 2,203,021, to the corresponding date of 1866, and 2,388,989, to the corresponding date of 1865. In these totals copper figured for 1,583,132, 1,467,921, and 1,752,653, respectively. British India appears likely to pay the mother country something over 1,000,000, for copper this year.

THE LINCOLN GOLD MINES—CALICO ORES.—We extract the following from the *Alta-California* of Oct. 10, 1867:—

"We had an idea that the curious calico ores worked at the Lincoln Mines and at Quail Hill are something new under the sun, in addition to the many singularities which are nowhere found but in California. We find that there is just such a formation, and just such calico ores, in South America. This may be important to us, as leading to some better estimations of the practical value of what we have. The Calico Ore Mines of Chile are in every respect like those we recently described as now being worked in California. They have been worked by the family of Don Manuel Portally for a century. They are located 75 miles south of Santiago, Chili, and 30 miles east of Rancagua, province of Santiago, western slope of the Cordillera. The mine is called Leona, or the Lincoln Mines, and, as at Quail Hill, the vein matter at the Leona Mine is several hundred feet wide. It has been exhausted above the water-level, and the present workings are to a great depth below; there is much less water than in any other mines of equal depth; the principal production is silver. Silver is also a portion of the product at Quail Hill and at Lincoln. At the lowest depths worked in the Chili Mine the ore has not changed its character; the sulphates below are decomposed as they are above the water-level. Should this be the case in our California calico ore belt it will be a great addition to its value; the Leona ore, like our own, are of great value, but they mine cheaply. The yield in these rude arrangements is averaged over \$8 per ton; the quality is without limit, and the mine has proved a source of permanent wealth. The deposit at the Leona Mine has an extent of two miles. We are not advised respecting other deposits on the extension of that mineral belt, but in Calaveras and Placer counties the same calico ores have been found at several points, and whilst many prove barren, there is every encouragement for prospectors to search along the whole 80 miles between the extreme points at which it has been well proved to be workable—at Harpersburg, in the Lincoln Gold Mines, in Placer, and at Quail Hill, in Calaveras. At this latter place the mill now about to make its regular clear-up will soon give us the exact figures as to the actual profit of working calico ores by the present process, which, we may be assured, will be greatly improved by future experience."

CHONTALES GOLD AND SILVER MINING COMPANY.—(From Mr. Peter Watson's "Weekly Mining Circular and Share List" of yesterday, No. 481, Vol. IX.)—Apart from the corroborative testimony adduced by all who have inspected these mines as to their great gold-producing capabilities, one fact—and a material fact it is—in connection with their remunerative development appears to have been altogether ignored, more particularly by those whose pecuniary object is anything but the success of the enterprise. The fact to which I allude is this—that Capt. Truran (the confidential agent of Mr. Noakes, the managing director), dispatched to Nicaragua to verify the statements made as to the auriferous capabilities of the property, in his first special report stated that "after a careful inspection of the different mines, and looking to their extent, I am of opinion that it will require 2½ years to put them into a good course of working, and the erection of suitable machinery for their development." Singularly enough, notwithstanding the many untoward difficulties which have been encountered and surmounted, the time computed as necessary to complete the machinery has not elapsed, and yet a large portion of the machinery has been erected. Mr. Truran, upon his return from the mines, stated that while Capt. Paul has admitted "that he was out in his estimate as to the time it would take to erect the whole of the requisite machinery, he is more than ever convinced—from the subsequent development of the mines—that his estimated annual profits will be made." The advice just received as to the effect that the general condition of the mines remained the same as last reported. No cases of cholera have occurred since the 28th September; it is, therefore, hoped that the disease is passing away. No remittance of gold has been received, as it was thought better not to break up the cups for September, but it is stated that the next remittance will be proportionately increased. On the whole, therefore, we may consider the news to be of a much more favourable character than might have been anticipated. I, therefore, strongly recommend a purchase of shares at present prices.

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COAL CUTTING MACHINERY.—The WEST ARDSLEY COMPANY, having, by recently patented improvements, perfected their coal cutting machinery, worked by compressed air, are NOW READY to MAKE CONTRACTS for the CONSTRUCTION and USE of their MACHINES. The results of twelve months' experience in the working of these machines, by the West Ardsley Company, have proved most satisfactory, their use being found to CHEAPEN the COST and IMPROVE the average SIZE of the COAL, to LIGHTEN the LABOUR, and also to MODIFY the SANITARY CONDITION of the MINE. All communications to be made to Messrs. FIRTH, DONISTHORPE, and BOWER, No. 8, Britannia-street, Leeds.

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Mining Correspondence.

BRITISH MINES.

BEDOL-AUR.—H. R. Harvey, Nov. 21: The 100 yard level, on St. Vincent's vein, is at present in disordered ground. The 100 yard level south-west is producing good stones of lead; the ground is of a highly favourable nature. Jones's BRONFLOYD UNITED.—Thos. Kemp, Nov. 20: The lode to the west of cross-cut, in the 63 fathom level, is worth fully 35 cwt. of lead ore per fathom. The lode to the east of cross-cut, is worth from 20 to 25 cwt. of ore per fathom. The stope under the 50, is worth about 2 tons of ore per fathom. The stopes in the back of the 52, east and west of winze, are worth on an average 15 cwt. of ore per fathom. The lode in the 40 fm. level west end, is worth 20 cwt. of ore per fathom. The improvement which took place in this level last week, holds out well, and is likely to continue. On Monday we sampled 50 tons of lead ore, which will be on sale on the 28th instant.

BRYN GWOG.—S. Harper, Nov. 20: The 102, east of engine-shaft, is without change since last report. In the 90 west the lode continues much the same as for some time past. The lode in the 85, west of No. 1 winze, is worth 2 tons per fathom. The stope in the bottom of this level, west of No. 1 winze, are worth 2 tons per fathom. The lode in the 85, east of No. 3 winze, is worth 2 tons per fathom. The lode in the 75 west is gradually improving, now worth 1 ton per fathom, and a very promising-looking one. The lode in the 65 east continues of much the same character as last reported. Bramwell's shaft sinking below the 105 yards, is communicated with the rise from the 66 fm. level. We have now a communication to the 75 fathom level; it will only require two or three days to make good the holding point, which is quite satisfactory, when we shall commence to fix in skip-road, and draw off the stuff as soon as possible from the 75 fm. level. I hope to complete this work in the time named in my report of Oct. 21. Our tribute department is not looking so favourable as formerly, but I hope a change for the better will soon take place.

CAPE CORNWALL.—Richard Pryor, William White, Nov. 20: The lode in the 100 fathom level, east of engine-shaft, is still improving in its appearance and character. All other places are much the same as when last reported.

CARADON AND PHENIX CONSOLS.—Wm. Johns, Nov. 18: No. 1 lode, in the 60, west of shaft, is presenting an improved appearance, composed of quartz and blende, mixed up with yellow copper ore, with a little water oozing from the end, which may be considered a favourable indication for a further improvement. In No. 2 lode, in the 50, east of shaft, we cannot speak of any change since last reported; the ground is moderately easy for progress, and is pushing on to get under the kindly lode seen in the 30. We have resumed the driving of the 30, east of the engine-shaft, and west of the cross-course, on No. 2 lode; this had been suspended for some time past, when in the cross-course, and the lode in leaving the influence of this cross-course is very regular, and of a good size, containing prill, with abundance of muddle—a good looking lode. We are still clearing the adit cross-course, west of the engine-shaft, and north of No. 1, but up to this date we have not reached the end, neither seen the lode reported to be standing in that direction. The machinery, on the whole, is in good working order, and keeping the water drained to the bottom of the mine very satisfactorily.

CARADON CONSOLS.—S. Bennetts, Nov. 19: The shaft below the 68 progresses favourably. In the 68 west the lode fluctuates in produce from 1 to 1½ ton per fathom. In the 58 west it continues small, although ore, but not sufficiently so that any value can be attached to it.

CENTRAL SNAILBEACH.—J. Kitto, Nov. 21: We have intersected the lode in the 164 yard level cross-cut north, and communicated with the sump from the 134. We shall now push on the level westward on the course of the lode, with a view of reaching as soon as possible the run of ore ground we passed through in sinking the sump; this I expect to reach in about six weeks, when I hope to be in a position to report something more encouraging.

CHANTICLEER.—W. Wasley, Nov. 20: I am glad to say that the lode in the 110 yard level end, driving west of the shaft, is now full 20 in. wide, of soft clay, spar, &c., with nice lumps of ore, but not enough to value. I think, however, from the kindness of the ground and lode, together with the favourable surface formation to which we are now approaching, we shall soon get into a good run of ore. The men are making good progress in driving.

CLARA UNITED.—J. Davis, Nov. 20: There is no alteration in the 62 since my last. I expect that we shall reach the footwall side in about 3 ft. more driving. I have put four of the men that were stopping in the back of the 40, to drive the 50 fm. level west. About two-thirds of all the water in the mine is coming out of this end, and I expect that we are near to another shoot of ore. Stopes No. 2 and 3, in the back of this level are worth respectively 12 and 14 cwt. of lead ore per fathom. Stope in the back of the 40 fm. level, produces 15 cwt. of ore per fathom. This stope which is standing to the south of the former workings, is holding out well.

CRELAKE.—Wm. Skewels, Wm. Hooper, Nov. 21: The lode in the 86 west is 1½ ft. wide, composed of muddle and spar, and yielding saving work. The lode in the 74 west is 2 ft. wide, composed of muddle, capel, and copper ore, worth 6½ per fathom. In the 62 west the lode is 2½ ft. wide, worth 8½ per fathom. The lode in Nos. 1 and 2 stopes, in the back of this level, are worth 10½ and 8½ per fathom. In the 50 west the lode is 2½ ft. wide, and worth 7½ per fathom. The lode in the stope in the back of this level is worth—No. 1, 10½, and No. 2, 11½ per fathom. We calculate to complete the securing of the 40 fm. level west by the end of this week, and hope to be able to report favourably on the lode in next week's report. The lode in No. 1 stope, in the back of this level, is 7 feet wide, worth 30½ per fathom; and in No. 2 stope the lode is 2 ft. wide, worth 7½ per fathom. The lode in the 28 west is 5 ft. wide, composed of strong muddle, capel, and copper ore, worth 18½ per fathom. The lode in the rise in the back of this level is 2½ ft. wide, worth 4½ per fathom. The lode in the stope in the back of this level is 2 ft. wide, worth 2½ per fathom.

CROWN AND WENDRON.—R. Reynolds, Nov. 19: The lode in the 10 west is about 1 ft. wide, producing saving work for tin. Fair progress is being made with the cross-cut, and we hope in a few days to reach the lode. We shall sell a parcel of tinstone to-morrow, of which you shall be duly advised.

CUDDRA.—F. Puckey, A. Cundy, Nov. 19: In the 142, west of Walker's shaft, we have at length cut through the tin part of the lode, which is here 9 ft. wide; the character of the lode is good, but it is not very productive at this point for tin, and in consequence thereof, and its excessive hardness, we have decided on driving about 5 fms. further west by the side of the same, in order to get under the best run of tin ground gone down from the 30. In the 130 we have cut into the lode 5 feet, which is principally capel, and is very hard, and expensive for exploring, owing to which we have now resumed driving by the side of the lode, in order to get back very much quicker under the extensive run of tin ground in the 100, where we have strong indications of there being very much good tin ground to take away when we reach that point, as the bottom of the 100 has a productive lode for a considerable length, and seems to require only the ground to be explored to open up a new and lasting mine. The quantity of tin ground which will be laid open when the 142 is driven to the full distance will be something enormous, being upwards of 3000 solid fathoms of productive lode, if it should on an average prove only equal to what it has been in the 100. The lode in the different stopes is very large and changeable, and at the present time our tinstuff is not of high produce, but we are expecting an early improvement.

CWM ERFIN.—Nov. 19: There is no improvement in the deep adit level since last report; the lode is still very small and poor. The lode in the rise over the back of this level, about 35 fms. east of the boundary, is 2 ft. wide, and worth 6 cwt. of lead ore per fathom. The lode in the stope over the back of ditto, about 50 fms. east of the boundary, has improved since the last report, and will now yield 2 tons of lead ore per fathom. We have two other stopes in course of working over the back of ditto in which the lode will yield on an average 1½ ton of lead ore per fathom. The lode in Taylor's drift, going west of the footway winze, has slightly improved during the last few days, and is now worth 12 cwt. of lead ore per fathom. The lode in the same level, east of the boundary, is small, and of no value. A cross-cut has been driven north in the same level to prove whether any portion of the lode has been thrown in that direction by the slide; a few fathoms more will prove this. The lode in the stope over the back of this level, 25 fms. east of the boundary, is 4 ft. wide, and will turn out 1 ton of lead ore per fathom. We have four other stopes in course of working over the back of the same level, in which the lode will yield on an average from 12 to 15 cwt. of lead ore per fathom. The lode in the stope over the back of William's level has very much failed during the last week; it being within about 18 fms. to the surface, and the ground is broken up for the purpose of putting up a rise for a fathom or two, previous to our abandoning the same. On the whole, our stopes continue to look very well, but we are looking out for something fresh in our eastern levels. We shall sample on Tuesday next 60 tons of good ore.

DALE.—R. Nines, Nov. 18: We have, to all appearances, reached the ore-bearing part of the Pipe vein in the 44 south, and, as far as we can at present judge, it will prove quite as rich as in the sink above, which is not drained at present. There is no change in the 44 fm. level cross-cut. We are putting in an incline railway from the 32 to the 44 fm. levels, to take the ore over, and do away with drawing with the winze, as heretofore.

R. Nines, Nov. 20: We have just communicated the 44 level south with the bottom of the sink below the 37, which we will open up as soon as possible. There is no alteration in the western cross-cut.

DEVON AND CORNWALL UNITED.—T. Neill, Nov. 19: In the ends we are driving by the side of the lode. The pitches are much the same as for some time.

DRAKE WALLS.—Thos. Gregory, Nov. 20: The branches in the 50 fm. level, east of south cross-cut, are worth 12½ per fathom. The branches in the 30 fm. level, south of cross-cut, are worth 18½ per fathom. In this drive, which is a new discovery, we have not as yet reached the south wall, the prospects, therefore, may be considered satisfactory. The branches in the adit level, south from the old workings, are worth 12½ per fathom for the part being carried; we shall take down the remainder of the south branches by our usual mode of stoping as we advance. The several stopes opening on the south, or new discovery of tin ground, are profitably productive, with every prospect of a continuance. We are pushing on the erection of the new stamps, together with the dressing-floors, and no time will be lost on this important work.

EAST CHIVERTON.—J. Grose, Nov. 16: Since last report we have driven in south, and cut the branch that passed through the shaft some 5 fms. above the present level, where we find it small, and similar to what it was in the shaft, consequently we have suspended this point, and resumed the driving of the cross-cut north, expecting to meet with the north part of the Chiverton lode, and as well intersect the caunter and other lodes that are known to be averse to this part of the sett. No. 1 lode, in the end east from cross-cut, is 1 foot wide, composed of capel, killas, spar, and some muddle. In the end west the lode is 9 in. wide, a very promising lookan and muddle; driving at 36½ per fm.; we intend to push the level to get under the ore ground passed through in the shallow level, near the boundary shaft, where we hope to meet with a productive lode. Our engine, &c., is in good working order.

EAST GUNSLAKE.—J. Bray, Nov. 21: In the 54, west of Gard's shaft, there is no change to note. We have resumed driving the cross-cut south of the 36, for the purpose of intersecting the middle and south lodes. The development of this point I shall look forward to with much interest, as I think there is every chance of our opening up something good at this point. In the shallow adit the lode is still large; the part we are carrying is 4 feet wide, composed of goosar and prill, with strings of black ore, as pretty a lode as can be seen.

EAST LAXEY.—W. H. Rowe, Nov. 18: There is scarcely any change here to report since last week. The lode is nearly all composed of very hard rider of quartz, with a little copper and black jack.

EAST NEPTUNE.—P. Floyd, Nov. 21: Hosking's shaft is sunk 4 fms. 3 ft. below the 25. The 25 east, on the old Neptune lode, is worth 10½ per fathom; driving at 3½ per fm. The 25, on the caunter lode, is worth 6½ per fm.; we ex-

pect an improvement here in a few fathoms further driving, where the lode intersects or joins the old Neptune lode. The stopes in the back of the 15, east and west, are producing saving work for copper.

EAST SNAREFELL.—W. H. Rowe, Nov. 19: Although not just now yielding as much ore as last week, the 15 end looks very kindly, and the lode still producing good saving work. We have not yet reached the footwall of the lode in the new shaft, and the water is getting heavy.

EAST ROSEWARNE.—A. Glasen, Nov. 21: In King's shaft, sinking below the 15, the lode is 1½ ft. wide, worth 10½ per fathom. The sinking of the shaft will be suspended while the men are opening ground for trip-plat, which will take about three weeks from this date. There is no change to notice in the 105 fathom level since my last report. In the 105 east the lode is 12 inches wide, worth 5½ per fathom. In the 95 east the lode is 12 in. wide, producing good stones of copper ore. In the 95 west the lode is 6 in. wide, worth 3½ per fathom. In the 85 west the lode is 10 in. wide, worth 6½ per fathom.

EAST WHEEL RUSSELL.—W. Richards, Nov. 19: We have intersected and cut through the north lode in the cross-cut north in the 130, east of the slide, and find it to be 3 ft. wide, containing capel, quartz, peach, muddle, and a little copper ore, but not enough of the latter to value. The north wall is well defined, and we shall now drive east on its course. I am glad to acquaint you that one pair of the tributaries in the back of the 66, east of Homersham's shaft, have, by driving a short cross-cut north, intersected the north part of the middle lode, and made, from present appearances, a good discovery; this part, as far as opened on, is 3 feet wide, and will yield 5 tons of moderate quality yellow copper ore per fathom, and, judging from its present bearing, it seems to be going back north of the drive into new ground; this will be proved by further development. I will send you the regular report of the mine to-morrow.

W. Richards, Nov. 20: The ground in the various cross-cuts without any particular change since last week; we will push them on as fast as possible for proof of the objects before us. The lode in the stopes in the back of the 140 is worth 4½ per fm. Having cut through the north lode in the 130 cross-cut we have commenced to drive east on its course, it is 13 feet wide, and well defined, containing capel, quartz, peach, flookan, muddle, and yellow copper ore. I have set 5 fms. or more month out, at 4½ per fm.; water issues freely from it. The ground in the 88, west of the cross-cut, is become more compact at the present time, and the lode dipped in to 15 in. in width, and worth 7½ per fm. only now, I am of opinion it will improve as soon as the ground becomes easier again. I am glad to say the discovery in Jenkins's pitch, in the back of the 66, continues to produce 3 tons of yellow copper ore per fm.

W. Richards, Nov. 21: There is no change to report to-day; the lode in Jenkins's pitch in the 66 is of the same value.

EBURY.—F. Evans, Nov. 20: There is a healthy strong lode in the shaft sinking below the 40; this sinking has been delayed on account of taking up the water to a sallow, but it will go on uninterruptedly now. I hold the opinion that we shall ere long make some good discoveries of lead ore, and we have only to persevere with the sinking of this shaft to accomplish this very desirable object.

GAWTON COPPER.—George Rowe, George Rowe, jun., Nov. 16: The 70 fm. level cross-cut, north from the new engine-shaft, has passed through the south lode, which is 1½ ft. wide, and 5 ft. thick, and is a most flattering description, being composed of sulphur, muddle, quartz, and fine rocks of black oxide and yellow copper ore. We purpose to continue the cross-cut north in the same direction to intersect the main lode, which we calculate is some 3 fathoms ahead. As soon as the cross-cut is sufficiently in advance to admit of full operations with an increased number of hands, we purpose to commence driving on the south lode, both east and west, and also on the north or main lode. By so doing we shall in this level be in a position to force on four drivings on the course of the lode, and we will be perfect auxiliaries to the amount of from 3 to 4 tons per fathom, the mine in depth. The lode in the 60 east is worth 3 tons of ore per fathom, and showing a very kindly appearance for much further improvement in this direction, as we find the great shoot of ore first discovered in the 50, and then continued down in Moor's winze, to be dipping fast west towards the driving in the 60, and showing indications to concentrate with the rich shoot of ore direct north from the engine-shaft. The lode in the winze sinking below the 60 is 5 ft. wide, carrying a rich leader on the wall, and the remaining part yielding good quantities of ore, the amount of from 3 to 4 tons per fathom. The lode west from Moor's, below the 50, where we purpose sinking a new winze, is worth 8 tons of ore per fathom. The lode in the stopes above this level is worth 6 tons of ore per fathom. We have commenced an intermediate level west from the rise in the back of the 50 west, old sump, where we have a good lode, worth 5 tons of ore per fathom, going away in a very extensive piece of whole ground, which we consider a very important improvement. All other points of operation throughout the mine are progressing very satisfactorily, and our dressing department in a forward state towards the next sampling.

GREAT NORTH DOWN.—W. R. C. Bowden, Nov. 20: The south part of the lode in Siegan's shaft is getting more porous, and the water coming through it at the very bottom of the shaft with greater force than formerly. We look upon this as indicative of our having nearly sunk through the hard capels, and makes us feel sanguine that the lode is more productive, and also easier for working, at no great depth; the part of the lode now being carried is worth 15½ per fm., and we have left the north part standing, which is also worth 15½ per fm. The sinking is being urged on as heretofore, and is going on rapidly as possible. The lode in the 86 west is easier for driving than it has been, and although the value is about the same as when reported last week (8½ per fathom), still it has a better appearance, and looks likely to improve. The 70 end west is worth 10½ per fm.; the stope in the back of this level is worth 12½ and 16½ per fm. respectively. The winze below the 70 is worth 15½ per fm.; this winze is sunk nearly 12 fms. through a good paying lode, but the air is so bad that we are again obliged to suspend it till the 86 end is driven under, when a communication can soon be made by a rise in the back. Three stopes in the back of the 86 are worth in the aggregate 3 tons of ore per fathom. The lode in the 80 east and west, at Butler's. The 70 end east is worth 18½ per fathom. Butler's shaft, below the 70, is worth 10½ per fathom; the men are now engaged cutting trip plat below the 70 fm. level.

GREAT RETALLACK.—G. R. Odgers, J. Harris, Nov. 20: No. 1 Lode: The men are getting on very well with the sinking of the engine-shaft below the 20. The lode in the 20 south is 15 in. wide, of quartz, &c., and producing good silver lead, worth 3 cwt. per fathom. The lode in the 20 north is altogether 2 ft. wide, and producing good silver lead, worth 3 cwt. per fathom. The lode in the 20 west is 15 in. wide, of solid lead, and the part of the lode is standing in the bottom of the level. We have been obliged to suspend the end, and place the men to rise against the winze sinking below the 10. This work will be effected in about a week, when we shall resume driving the end. The lode in the rise is worth fully 15 cwt. of silver lead to the fathom, and judging from the brass lead in the north end of the level, we will be getting on very well with this end. The lode in the winze sinking below the 20 will produce 4 cwt. of silver-lead to the fathom. The lode in the winze sinking below the 10 will produce fully 5 cwt. of lead to the fathom. The stopes are producing good lead. We are getting on well with the dressing.

GREAT SOUTH CHIVERTON.—J. George, Nov. 20: There is still a very fine looking lode in the 30 west (north end), and worth the same for lead as was reported last week; we believe this to be the top of a valuable shoot of ore dipping west, as all other runs of ore do in the rich mines of the neighbourhood, and in sinking up to 80 feet, the lode is still producing 3 tons of ore per fm. In the 20 west, the lode is 1½ ft. wide, and producing 3 tons of ore per fm. to hand you the following as our report of this mine:—The 75 fm. level cross-cut is driven south of Hill Brothers' engine-shaft about 51 fms.; the ground at present is rather spare and troublesome for driving, being intermixed with veins of spar, interspersed with muddle; the end is letting out a quantity of water, and, judging from the appearance and character of the same, should think we are not far off from the tin lode; the end is set to drive to-day again to six men, at 16½ per fathom, which will be pushed on with all possible speed, in order to reach the point. The lode in the 75 end west from the cross-cut, is improved, and is now full 2 feet wide, containing muddle, prill, flookan, and stones of silver-lead; the ground in which the lode is embedded is also greatly improved, and congenial for lead. We believe, from present indications, that an important change for the better will shortly take place, as the lode is everything that can be wished for, with the exception of a bunch of lead; this end is also set to six men, at 4½ per fathom, which clearly shows that a decided improvement in the ground and lode has taken place; this end is driven about 42 fms. west from the cross-cut, and we beg to make the following remarks as to the future development of this mine:—The driving of the 75 cross-cut, south of Hill Brothers' engine-shaft, should be pushed on with all possible speed, in order to reach the tin lode; and, looking at the character of the ground, although a little hard and troublesome for the present, being intermixed with spar and muddle, we fully believe the tin lode will be shortly met with.—2d. The driving of the 75 fm. level, west on the Badden lead lode, should be pushed on with all speed, and judging from the change which has taken place in the last 3 fms. driving in the character of the lode, combined with the ground, and also being upwards of 40 fms. in the western hill towards the old mine, we fully believe that a great and important improvement will be shortly met with, and that we shall ere long, meet with a bunch of lead. By continuing on the two points herein mentioned, we do not hesitate to say that we shall open up a mine that will well pay the adventurers for their long perseverance and outlay.

GREAT WHEEL FORTUNE.—T. George, Nov. 21: The lode in the pitch in bottom of the 114 is further improved, now worth over 1000 per fm. No change in any other part of the mine.

GWYDR PARK.—W. Heath, Nov. 19: There is no particular change in Gwyn Liffon deep adit since last report. In Gwydr adit driving west the lode is about 1 ft. wide, principally composed of spar, muddle, blende, and good stones of copper ore—a kindly lode.

HARWOOD.—J. Race, Nov. 15: We have cut nothing of importance in the end of Scarhead level yet. The stope in the back of the drift east in the north string is improved a little to-day, worth from 10 to 12 cwt. of ore per fm. at present; the stope underfoot, in the west end of north string, is nearly worked out up to the end; I think we shall have to drive the end away again next week. The stope in the south branch is worth ½ ton of ore per fm. No change to note in Lack's old level nor in Green Band level. We have 3 tons of ore dressed and on the floors, and from 3 to 4 tons more broken in the mine. Walton and Co. have lifted all their 20 tons.

LOVELL CONSOLS.—William Chappell, Nov. 22: We have cleared the adit level, east of Cambellack shaft, 40 fathoms, for 30 of which the lode has been 16 to 18 feet deep, by the former workers. We are daily expecting to clear to the end, where I am informed the lode is 2 feet wide, and producing good work for tin. The Cambellack shaft is sunk 9 fathoms below the adit level, and the tin raised from this shaft paid the whole cost of the mine. There is now a good lode in the bottom. The Cambellack lode is the largest and strongest I have seen in the mine, and the former workers had a splendid course of tin for 30 fathoms long. As soon as we can see the end and level cleared we shall drive the end east, and clear the shaft to the bottom. We shall attach surface rods to the engine, and sink on the course of the lode below the adit. I am very much

pleased with the appearance of the lode in the bottom of the adit, which will produce a good sample of tin in any part for 40 fathoms long.

MINERA UNION.—W. T. Harris, Nov. 21: Douglas's Shaft: The lode in the 60 yard level north is 1½ foot wide—poor for lead; the pitch in bottom of this level yields good stones of lead. The pitch in bottom of the 80 yard level south is worth 10 cwt. of lead per fm.—Williams's Shaft: The lode in the rise in back of the 40 yard level north is worth 15 cwt. of lead per fm., and very promising; in No. 2 rise the lode is worth 10 cwt. of lead per fm.—Low's shaft is 24 yards deep; the portions of lode in the shaft is worth 5 cwt. of lead per fm., with a good prospect of an improvement when a little deeper.

MOUNT PLEASANT.—W. Wasley, Nov. 21: In my last I mentioned that we were on the top of a new bed, which I thought we should find to be a bed of sandstone in the bottom of Jenkins's shaft; I have found, however, in sinking that it is a bed of limestone, about 2 ft. 6 in. thick. We then got to a bed of shale, which is about ½ yard thick. Then we got to a bed of very hard limestone, 2 ft. 6 in. thick, and are now in a bed of shale. Last Saturday being our setting-day, the following bargains were set:—The shaft to eight men, to sink now 102 yards from surface. At Bright's shaft I set for four men to sink a new winze north of the air-way winze, at 15s. per yard, and 40s. per ton to sink up to 8 tons, if any over 8 tons, for the month, to be at 20s. per ton, to sink pay 4s. per ton for dressing the 8 tons, and all other costs, as usual. We men to sink Thursday 5 tons of ore, at 10s. 6d. per ton.

NANGLE'S.—J. Rowe, Nov. 20: The lode in the 130, west of the engine-shaft, is 3 ft. wide, containing very kindly quartz, mixed with copper ore, a promising lode; the end is just now under where we had a good lode in the 120. The lode in the 120 is 4 feet wide, and containing good stones of ore; this end has also improved in appearance. The stope in the bottom of the 120 is a poor neck of ground; there is a lode worth 15½ per fathom, 10 ft. before us. We have nine men driving the 130 fm. level cross-cut, north of the engine-shaft, at 18½ per fathom. We have met with a floor of muddle and quartz coming from the north; we think it must be coming from a lode.

NETHER HEARTH.—W. Vipond, Nov. 13: We have no change here worth notice. I have sent two of the men to-day to put up air-pipes from the shaft to the small vein; they will air the place thoroughly in a day or two. Though only 7 or 8 fms. from the shaft, it is very easy and close, from the acuteness of the cross-cut. I send you a sample to sell 11 tons of lead ore, which is now ready. Each end in the small vein is worth fully ½ ton of ore per fm.

NEW BIRCH TOR AND VITIFER CONSOLS.—W. Skewels, R. Trevarthen, Nov. 15: The ground in the 48 is improved for driving; the lode is 1 ft. wide, and worth 5½ per fm. We think they are got through the hard bar of ground, the men will take it down on Monday or Tuesday next. The 2½ of Hambley's shaft, is in a fine soft elvan on both sides; lode 3½ ft. wide, not quite so much iron in it as when we wrote last; lode more settled, containing a lot of soft spar, with stones of tin. We shall have about the same quantity of tin this time as we had last month.

NEW CLIFFORD.—J. Michell, Nov. 21: In the cross cut south of the 50 fm. level the water issuing from the end has increased, it is now twisting out in all directions. I think we shall have a lode here soon. In the north cross-cut there is no change. The ground in both ends is favourable for progress.

NEW CROW HILL.—W. Trelease, Nov. 19: I have no change to report this week in any part of the mine worthy of notice. The branch in the 70, mentioned in my last two letters, is still producing some capital stones of lead ore, but it is now nearly all gone out of the end on the lode side of the level. The winze is just the same as last week. Both stopes above the 35 continue to produce some good ore; stope above the 35 have no doubt of getting 1500, worth of ore for next pay. The lode in both ends at the 60, at Louisa, is the same as last week, the west end producing some good stones of ore, and the east end spotted over with lead.

NEW TRELEGH.—Samuel Michell, Nov. 20: The lode in the 70 is looking very encouraging indeed, apparently opening wider, and producing more ore. We have taken down some of the capel on the north side, and find it to be having thoroughly through it. There is no change in the tin notice. We have had a delay with our boiler since Monday night; it commenced leaking in the bottom flue, which was difficult to get at to repair; it is now nearly fixed, and will be working again to-night. We are getting on as fast as we can at Nicholson's, but can hardly say what day it will go to work.

NEW WHEEL TOWAN.—Richard Pryor, Nov. 20: The ground in the adit level, driving west, is a little more spare for driving than when last reported, being mixed with more spar. No lode has been taken down during the last week.

NORTH DEVON.—J. Blamey, Nov. 19: The shaft sinking at Buzzacott is down 11 fms., and we expect to cut the lode in 1 fm. further sinking. The ground is very congenial for the production of minerals. We are now sinking through capel and spar, and the joints of the rock show copper, lead, and muddle, so that we are evidently close upon the lode. In the 40 we expect to cut the caunter lode daily, when we shall at once resume the sinking of the winze.

NORTH DOWNS.—F. Pryor, J. Grenfell, Nov. 19: Setting Report: The 60 fm. level to drive west of King's shaft, by six men, at 7½ per fm.—at present not to value. Four men to rise in the back of this level, at 6½ per fm.; value, 6½ per fm. Four men to stop in the back of this level (60), at 2½ per fm.; value, 12½ per fm. Four men to drive the 50, west of King's, at 5½ per fm.; value, 8½ per fm. Six men to sink a winze in the bottom of the 50 fm. level, at 6½ per fm.; value, 15½ per fm. Four men to rise in the back of the 10 fm. level, at 6½ per fm.; value for its length (10 ft.), 8½ per fm.; this rise is within 20 fms. of the end, and when communicated to the 40, will serve to ventilate that level, as well as prove the ground. Four men to drive the 40 fm. level, west of King's, at 4½ per fm.; producing stones of ore, but not to value. Two men to drive east of Bennett's shaft, on the south lode, at 4½ per fm.; producing stones of ore. Eight men on tribute—four at 8s., and four at 15s. 4d. In 1½ hr. we shall sample on Tuesday next, the 26th inst., about 110 tons of ore, of pretty good quality.

NORTH JANE.—J. Rowe, Nov. 16: We are glad to report a change in the 35 fm. level cross-cut, south from Lead's shaft. On the last hole blasted we have stones of elvan, mixed with killas, similar to what we had as a crust of the elvan course when we first intersected it. In a few days we hope to report a further improvement. The ground in the cross cut driving north from Northey's shaft is in highly mineralised ground, and we find very rich stones of muddle in the branches which we meet with. This end appears near a lode. Our prospects are better.

NORTH PHENIX.—J. Secombe, J. Martin, Nov. 15: The 160 to drive west in the killas on the south side of the lode by six men, at 7½ per fathom; the ground has a little improved. The 140 to drive west in the killas on the south side of the lode by six men, at 5½ per fathom; the leader on the wall of the lode contains muddle and spots of ore, and is letting out water more freely. To rise a No. 2 winze in the back of the 140 west by two men, at 2½ per fathom; this is to prove a point where the water is highly charged with copper. To drive east from No. 1 rise, in the back of the 140, by four men, at 3½ per fathom; for the whole of the 12 fms. driven we have had a good rich copper ore in the eastern end, therefore we propose driving a short distance to ascertain whether it improves in that direction.

NORTH POOL.—J. Vivian and Son, F. Clymo, Nov. 21: Middle Lode: In sinking the sump under the 40 the lode has again improved for copper, now 1½ ft. wide, and containing good stones of yellow copper ore, with a congenial matrix of quartz. In the 40 east the lode is improving, containing a good solid stoner yellow copper ore, 6 in. wide. In the 40 west the lode contains good yellow copper ore, which appears to be increasing in quantity. Balle's lode, in the 40, west of shaft, is 15 inches wide, composed almost entirely of quartz, which is of a favourable nature for the production of copper; this end is rapidly approaching the junction with the middle lode, where an important improvement may fairly be expected.

NORTH SHEPHERDS.—H. Bennetts, Nov. 21: The lode in the 50, west of engine, is at present split into two parts, with a horse of killas in the middle of the end, but I believe they will come together in about 6 ft. more driving, where we may expect the lode will improve. There is more water coming from the north part of the lode, and I form a better opinion of it. The 20, west of flat-roof shaft, on the Hart's lode, is much improved since yesterday, and is now presenting every appearance of a lode of great promise, and there is not a doubt in my mind that if this lode is developed at deeper levels, lead ore will be found in paying quantities.

NORTH RETALLACK.—G. R. Odgers, J. Harris, Nov. 20: The lode in the 10, north of the No. 1 boundary shaft, is 2 ft. wide, composed of quartz, goosar, &c., of a promising appearance, and the ground is also favourable for the production of lead.

NORTH ROSKEAR.—J. Vivian and Son, R. Angove, Nov. 12: Good progress has been made in building the engine-house at Pearce's shaft, the bob wall being up to its height, and in about a week the house will be complete, when the engine will at once commence putting the engine in its place. Pearce's shaft has been made complete for the rods, &c., at the following points:—From the surface, down 51 fms.; from the 50 fm. level, down 15 fms.; from the 70 to the 50 fm. level, down 10 fms.; from the 90 fm. level, down 3 fms.; from the 134 to the 90 fm. level, down 11 fms.; total, 90 fms. We shall from this time make much more rapid progress, the shaft being larger below the points which we have yet reached to the

bottom. The pa of the lode driving on in the 30 north is at present poor. East a part of the lode gone off to the east, and we shall put the men to drive east a part of the lode driving on in the 30 north. The lode is at present 30 ft. per fathom. We are doing all we can in cutting ground, &c., for the new work in the shaft, so as to keep the engine at work; also to keep the levels and stops going on previous to making the alterations in the pitwork.—South at present. The ground in the 63 fm. level cross-cut is not so favourable for progress as it has been for some time past, still we are pushing on this point as fast as possible. The progress in the 30 north shaft is not so good as it has become more settled, and the time standing all right. We are pushing on our dressing as fast as possible, and have made a good beginning for another sampling. All other work going on well.

worth it is 2 feet wide, worth 6l. per fathom. There is no change to notice in the 180 stope since last reported on. The stopes and pitches are producing much as usual. We sampled on the 15th inst. two parcels of lead ore—No. 1 (computed), 54 tons, and No. 2 (computed), 40 tons.

WHEAL TRELAUNY.—W. Johns, Thomas Grenfell, John Pryor, Nov. 20. The sinking of Trelawny's engine-shaft is going on favourably, and is down

skin, it removes all venous congestion, overcomes all mechanical obstructions to the free return of the blood, and prevents the deposit of serum and water. Holloway's Pills likewise augment this absorbing powder; they act more circuitously on the capillaries through the circulation, while his Ointment acts directly through the skin. Both should be employed in dropsies and diseases of the kidneys.

Projected New Companies.

Company.	Capital.	Shares.	Each.
Legal Co-operative Supply Association	£ 5,000	1,000	£ 5
Paraffin Wax	12,000	12,000	1
Stannion China Clay	2,500	250	10
Cerro de Pasco Mineral Railway	260,000	13,000	20
London General Street Tramway	500,000	50,000	10
Vernon Heath and Co.	3,507	3,507	1
John Whiteley and Co.	20,000	400	50

CERRO DE PASCO MINERAL RAILWAY COMPANY, 260,000L. in 13,000 shares, of 20L. each. The objects for which this company is established are the making, maintaining, and working a railway, and intermediate branches, for the conveyance of the silver and other ores from Santa Rosa, and other mines in the city of Cerro de Pasco, to the various haciendas de beneficio, in the vicinity of the said city, and the villages of Quillacocha and Sacrafamilia, and town of Pasco, in Peru; the acquisition of lands and minerals, the disposal of the same, and the introduction of labour for working of land, mineral, and other products, and the doing all such other things as are incidental or conducive to the attainment of the above objects. Guaranteed by contract between the Government of Peru and Messrs. WYMAN, HARRISON, and others, 7 per cent. per annum on the entire capital of 260,000L. for 25 years. The number of directors shall not be less than five, nor more than seven, two of which shall be Peruvians. First directors—HENRY B. SHERIDAN, THOS. CAMPBELL, WILLIAM FREDERICK WIGG, and two others, to be named hereafter in Peru. With the exception of the first directors, each of whom must possess 10 shares at least, every director must possess 50 shares at least, and the certificates for which shall remain in the custody of the board, and no one of which shall be transferred so long as he is a director, and this must be mentioned in the certificates of their shares. The remuneration of the directors shall after the completion of the railways be such as the company from time to time determine. The Memorandum is signed by—THOMAS HENRY HARRISON, 26, Beacon Hill, Camden Town, London, civil engineer, 20; SOLOMON WOODDELL, Windmill End, near Dudley, Worcestershire, manufacturer, 10; WILLIAM FREDERICK WIGG, The Grange, South Norwood Hill, Surrey, merchant, 10; HENRY BRINSLEY SHERIDAN, M.P., 17, Westbourne-terrace, London, 10; WILLIAM MARSDEN, junr, 3, Warfield court, The Grosvenor, London, E.C., stock broker, 10; HENRY SICKLING, 17, Gresham-street, London, accountant, 5; THOMAS CAMPBELL, 5, Westbourne-terrace, Hyde-park, banker, gentleman, 10; JAMES CAMPBELL, Esq., Sunning House, Kennington-road, and HENRY SICKLING, 17, Gresham-street, shall be the first auditors of the company, and they shall remain in office until the ordinary general meeting, to be held in the month of April, 1869, and their remuneration shall be fixed by the board of directors.

LONDON GENERAL STREET TRAMWAY COMPANY, 500,000L. in 50,000 shares, of 10L. each. The objects for which this company is established are to lay down and maintain tramways on the public roads and streets of the metropolis and suburbs, according to the system for which Letters Patent have been granted to CHARLES HERBERT BRIGHT, civil engineer, or according to any other system which may be adopted by the company; to work and use the same tramways, with carriages, for which Letters Patent have been granted to CHAS. HERBERT BRIGHT, C.E., or with any other carriages which may be adopted by the company; and also to work and use the same tramways, with other vehicles and trucks, drawn by animal power only, to convey and carry passengers, goods, and merchandise upon such tramways; to use and work the said carriages, vehicles, and trucks by animal power only, upon the roads and streets of the metropolis and suburbs, or any part thereof, wherever the said company shall deem it expedient so to do; to levy tolls, rates, and charges for and in respect thereof, and to do all such other things as are incidental or conducive to the attainment of the above objects. The Memorandum is signed by—GEORGE BULKLEY, 2, Pump-court, Temple, E.C., barrister-at-law, 5; CHARLES HERBERT BRIGHT, 2, Westminster Chambers, Victoria-street, Westminster, civil engineer, 5; GEORGE RITCHIE BIRMINGHAM, 13, Copthall-court, City of London, stockbroker, 1; BENJAMIN HANDLEY, 1, Westminster Chambers, Victoria-street, Westminster, civil engineer, 5; THOMAS MERRIGRAVE HEAPHY, 46, Sussex-street, Finsbury, civil engineer, 5; CHARLES EDWARD BALDWIN, 11, Bridge-street, Westminster, gentleman, 5; BENJAMIN RICHARD GREEN, 41, Fitzroy-square, Middlesex, gentleman, 5. Registered without Articles.

LEGAL CO-OPERATIVE SUPPLY ASSOCIATION, 5000L. in 1000 shares, of 5L. each, with power to increase. The objects for which this company is established are to supply members of the legal profession, being solicitors, barristers-at-law, and clerks, with the necessaries of life, and to purchase, for the purpose of the company, to borrow money, receive money on deposit, issue transferable or other bonds or mortgage debentures, or any other securities, founded or based upon all or any of the real or personal assets or credit of the company, &c. The Memorandum is signed by—WILLIAM STEBBING, 5, Old Buildings, Lincoln's Inn, barrister-at-law, 1; ARTHUR A. L. HARRISON, 2, New Inn, Strand, solicitor, 10; JOHN FINLAYSON, 40, Chancery-lane, barrister-at-law, 25; E. A. HANDLEY, 6, Stone Buildings, Lincoln's Inn, barrister-at-law, 10; S. B. ROBERTSON, 6, Crown Office-row, Inner Temple, solicitor, 25; LEWIS WILLIAM GREGORY, 2, New Inn, Strand, solicitor, 1; F. O. CRUMP, 2, Brick-court, Temple, barrister-at-law, 1. The number of directors shall not be more than seven or less than three. Qualification, 10 shares. First directors, EDWARD ALFRED HANDLEY, ARTHUR ARMSTRONG LOCK HARRISON, and JOHN FINLAYSON, Esqs. The remuneration shall be determined by the company at its first general meeting.

STANNION CHINA-CLAY COMPANY, 2500L. in 250 shares, of 10L. each. The objects for which this company is established are to purchase and take on lease, or otherwise acquire and hold, certain mines and beds of china-clay and china-stone pottery, and the clay in, upon, and under certain lands and hereditaments situate in the parish of St. Breward, in the county of Cornwall, now held under lease, or grant, dated Sept. 29, 1867, from Sir HENRY OSWALD, Bart., to GEORGE MARTIN, CECIL FELIC HOLDER, and JOHN HAMILTON, the purchase money or consideration for which is to be 1000L. To purchase, take on lease, or otherwise acquire and hold, such mines or beds of china-clay, china-stone, &c., in the neighbourhood of the aforesaid mines and beds as may from time to time be deemed advisable. To open and work all, or any, of such mines and beds, and extract the clay, &c., therefrom, and to dress and make marketable the same; and also therewith to make fire and other bricks, and tile and other things, and to sell the same for gain, &c. The Memorandum is signed by—GEORGE MARTIN, Trewin House, Camelford, Cornwall, gentleman, 50; E. F. HOLDER, Petwells, Camelford, Cornwall, late captain in the Hussars, 15; JOHN HAMILTON, The Wadbridge, Camelford, gentleman, 50; JOHN HAMILTON, Fernis Town, Truro, Cornwall, accountant, 20; JAMES HAMPTON, Fore-street, Bodmin, Cornwall, china-clay agent, 10; JOHN JAMES, 1, Truro Veau-terrace, Truro, Cornwall, 10; FRAS. EVANS, Camelford, Cornwall, clay agent, 10. Registered without Articles.

PARAFFIN WAX COMPANY, 12,000L. in 12,000 shares, of 1L. each. For refining of paraffin, petroleum, and other oils, fat, tallow, stearine, and other fatty, and oleaginous substances, the purchase and sale of any of the before-mentioned articles, either in a crude or refined state, or of any products therefrom; the purchasing or acquiring any interest in any invention or inventions, whether protected by Letters Patent or not, for improved methods of refining or manufacturing any of the said articles, or the products therefrom; the selling or granting licences to use any such invention; the contracting for the purchase, sale, or manufacture of any such articles or products therefrom; the purchasing of any building, plant, or machinery that may be requisite or necessary for the above purposes, or of any of them; and the doing of all such other things as are incidental or conducive to the attainment of the above objects. The Memorandum of Association is signed by—JOHN ROCHFORD UNICEK, 15, Burton-crecent, W.C., gentleman, late a captain in Her Majesty's army, 1; JOHN LILLEYMAN CLAYPOLE, 4, Palace-street, Buckingham-gate, gentleman, 1; SAMUEL CHANE FOX, Granville-park, Blackheath, Kent, gentleman, 1; F. J. ANSLIN LEITCH, 16, Albert road, Regent's-park, Middlesex, surveyor, 1; THOS. REGINALD LEITCH, 16, Albert road, Regent's-park, Middlesex, surveyor, 1; EDWARD HENRY MAY, Upper Parkfield, Putney, Surrey, bill broker, 1; GEORGE LEITCH, 2, South-park, Notting-hill, Middlesex, surveyor, 1. The number of directors, and the names of the first directors shall be determined by the subscribers to the Memorandum of Association, and until directors are appointed the subscribers of the Memorandum of Association shall be the directors of the company. Remuneration, 300L. per annum in every year until a dividend is payable to the shareholders of 10 per cent. on the paid-up share capital, and an additional sum of 100L. per annum for every 2 per cent. paid to the shareholders as dividend over 10 per cent. per annum until the total amount of remuneration shall reach 1000L. per annum.

JOHN WHITELEY AND COMPANY, 20,000L. in 400 shares, of 50L. each, with power to increase. For the purchase of certain paper, woolen, and other mills, warehouses, messuages, cottages, erections, buildings, or tenements, close of land, reservoirs, gasworks and premises, with the machinery now standing therein, commonly called the Firth House Mills Estate, situate in the township of Stainland and Barkisland, in the parish of Halifax, Yorkshire, heretofore occupied by John Whiteley and Son and their tenants; and also of purchasing the goodwill, stock in trade, and business of the said John Whiteley and Son as paper-makers; and of carrying on in the said mills, or at any other mills, warehouses, &c., it may be deemed advisable to purchase, erect, build, or rear, the trade or business of paper-makers, with all its branches and incidents thereto belonging, and also to purchase and acquire any other trade and business of a like nature, &c. The Memorandum is signed by—GEORGE CLARKE, 21, Manchester-street, Huddersfield, Yorkshire, innkeeper, 20; ALAN BROOKHAIGH, North-lane Paddock, near Huddersfield, Yorkshire, rag-merchant, 20; JOHN BARATT, 92, Upperhead-row, Huddersfield, Yorkshire, rag-merchant, 20; JOHN BARATT, Dalton, near Huddersfield, Yorkshire, farmer, 10; DAVID FOX, West Vale, near Halifax, Yorkshire, manufacturer, 10; JAMES ASHWORTH, Firth House Mills, Stainland, Halifax, Yorkshire, paper-maker, 10; CHAS. EMMET, of the Square, Halifax, Yorkshire, solicitor, 20; THOMAS PICKARD, 1, Eyre-road, Halifax, Yorkshire, solicitor, 20. The business of the company shall be conducted by five directors. First Directors—JOHN STOTT, JAMES STOTT, GEORGE CLARKE, A. BROOK HAIGH, and DAVID FOX. Qualification, 10 shares.

THE CAEN STONE OF FRANCE has a rival in the stratified limestone which underlies the whole of the high prairie land of Kansas. A correspondent describes it as white, cream colored, pink, yellow, and red, lying horizontally, and requiring no other quarrying than the use of a crowbar to lift it in blocks from its bed. So easily worked is it that he has seen it hewn into shape with a common wood-axe, and mortised with a carpenter's chisel as easily and quickly as a pine beam; he has also seen it planed with a jack-plane, sawed with a scroll-saw into brackets and ornamental door and window caps, and cut with a buzz-saw into blocks for street pavements or bricks of any size. The material hardens on exposure to air, and becomes as impenetrable as Tennessee marble.—*American Journal of Mining.*

LONDON GENERAL OMNIBUS COMPANY.—The traffic receipts for the week ending Nov. 17 was 9668L. 17s. 8d.

With this week's Journal a SUPPLEMENTAL SHEET is given in which appears—Prof. Smyth's Lectures at the Royal School of Mines, Nos. II., III., and IV.—Winder's Rotary Pump—Government Inspection of Coal Mines, No. II.—Hot Air for Blast-Furnaces—The Two Great Colliery Shafts of England and America—Hydro-Carbon as a Fuel, by Mr. F. H. Thomson—Foreign Mining and Metallurgy—The Australian Mines: Monthly Summary—Reports of Foreign Mines: St. John del Rey, Anglo-Brazilian Gold, Rossa Grande Gold, Alamillos, Linares, Fortuna, and Lusitania—Reports of Meetings: Prince of Wales, Wheal Kitty, North Wheal Robert, and East Wheal Rose—The Stannaries Court—Puddling by Machinery—Institution of Civil Engineers—Society of Engineers—Society of Arts, &c.

With last week's Journal a SUPPLEMENTAL SHEET was given, in which appears—The Government Mine Inspection Reports—Patent Ventilated Fuel—The Government School of Mines: Prof. Warrington Smyth's Lectures—Proceedings of Public Companies: Meetings of the New Wheal Lovell Mining Company: The Lucy Phillips Gold Company: The Cape Copper Company—Foreign Mining and Metallurgy—Foreign Mine Reports: The Lusitania, Nevada Land and Mining Company, Capula, Val Sassam, Pestarena, Val Antigoria, West Canada, and The Tin Trade.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, NOVEMBER 22, 1867.

COPPER.	£ s. d.	Per ton.
Best selected, p. ton	77 0 0	75 0 0
Tough cake and tile	76 0 0	74 0 0
Sheathing & sheets	80 0 0	—
Bolts	83 0 0	—
Bottoms	85 0 0	—
Old (Exchange)	70 0 0	71 0 0
Burra Burra	84 0 0	85 0 0
Wire, per lb.	0 10 0	1 0 1/2
Tubes	0 11 1/2	1 0
BRASS.	Per lb.	
Sheets	9d.-10d.	
Wire	8 1/2d.-9 1/2d.	
Tubes	10 1/2d.-11d.	
Yellow Metal Sheath, p. lb.	7 1/2d.	
Sheets	7d.	
SPELTER.	Per ton.	
Foreign on the spot	£21 15 0	
" to arrive	21 15 0	
ZINC.		
In sheets	£28 0 0	
TIN.		
English blocks	96 0 0	
Do., bars (in barrels)	97 0 0	
IX Ditto, refined	99 0 0	
Banca	92 10 0	
Straits	£89 10 0	90 0 0
TIN-PLATES.	Per box.	
IC Charcoal, 1st qty.	1 7 6-1 9 6	
IX Ditto, 1st qty.	1 13 6-1 15 6	
IC Ditto, 2d qty.	1 5 6-1 7 6	
IX Ditto, 2d qty.	1 11 6-1 13 6	
IX Ditto, 3d qty.	1 2 6-1 4 6	
IX Ditto, 4th qty.	1 8 6-1 10 6	
Canada plates, p. ton	13 10 0	
Ditto, at works	12 10 0	

* At the works, 1s. to 1s. 6d. per box less.
† A Derbyshire quotation: not generally known in the London market.

REMARKS.—It is a matter of regret, though not, perhaps, of surprise, that no alteration for the better has yet made its appearance in the Metal Market, and that still patience has to be exercised before the arrival of that long-waited-for, and much-desired improvement in business comes. It is to be hoped that the opening of a new Session of Parliament, with the activity in political affairs which always then takes place, may in some way lead to a corresponding activity in commercial affairs, and that the stagnation which appears to have come upon the latter may be found to give way before the life and vigour of the former. The assurance given in the Queen's speech at the opening of Parliament of the continued friendly feeling with all foreign powers, and that there is no reason to apprehend the disturbance of the general peace of Europe, will be received with much satisfaction, as also the statements from the Premier and the Foreign Secretary, by which it will be seen that the Government have avoided taking any part in the Conference proposed by the Emperor of the French in the dispute between Italy and the Pope, which there is too much reason to fear will lead either to failure or to dangerous entanglements, and yet have done so without in any way injuring the cordiality existing between this country and the French Emperor. We may, therefore, hope that these circumstances may tend to encourage a restoration of that confidence which is so much desired, and the want of which has been the great cause of so much inactivity in business; and when once this is fully restored we have no doubt the position of the Metal Market will be very different from what it now is, and that we shall find activity once more generally prevailing.

COPPER.—The market for this metal can hardly be said to have at all altered during the week; no transactions of any moment have occurred, and prices continue without much variation. Rather considerable sales of Chili bars have, however, taken place, principally at 69L, but some portion at 69L 10s.

IRON.—In Staffordshire orders came in slowly, and there is hardly so much doing as before. The closing of many of the principal ports always makes the trade quieter at the end of the year, and at present every market is dull. There are some hopes of a demand from the United States, and all accounts agree in stating that stocks are reduced to the lowest point everywhere. In Welsh the manufacturers are better off for orders than they were last week, and employment at the works keeps about the same. The closing of the Russian trade for the season has undoubtedly checked operations at several of the principal establishments, for while shipments to that country were continued makers had some degree of confidence in keeping their mills and forges going. Home contracts are slow in coming forward, and it is evident that until there is a little more animation in the money market buyers will restrict their operations to actual requirements. The exports last month reached 9645 tons, which is a tolerably good return, taking into consideration the time of the year. For common qualities of pig-iron there is only a limited demand, but brands of repute are in fair request. Of Swedish iron considerable quantities have lately arrived, but as the season is now about closing prices will, in all probability, be maintained. In Scotch pig-iron the market has been dull during the week, and prices have declined, the last price received from Glasgow being 53s. 6d. cash.

LEAD.—The demand has continued only limited during the week, and prices have remained without alteration.

TIN.—No activity has been manifested either in English or foreign. Sales of Straits in limited quantities continue to take place at 89L 10s. to 90L; but holders generally are indisposed to part with their parcels at present prices.

SPELTER.—The market for this metal has remained very quiet during the week, the price for parcels on the spot being 21L 15s., at which sales have been effected.

TIN-PLATES command a moderate sale, and quotations are rather in favour of buyers.

STEEL AND QUICKSILVER without alteration.

MIDDLESBOROUGH, NOV. 22.—The "Iron Trade Review" states:—There is no improvement to record in the state of the Northern iron trade. Notices of reduction in wages have been accepted by a considerable number of men at Darlington, and no resistance on the part of the men generally is expected. The pig-iron market is a trifle weaker. Makers are in future going to quote cash prices for pig-iron; these are now, No. 1, 46s. 6d.; No. 3, 43s. 6d.; No. 4, 42s.; mottled, 41s. 6d.; and white, 41s., nett cash, or 1s. per ton extra for four months' bill.

LIVERPOOL, NOV. 21.—Messrs. Knowles, Gorst, and Riso write:—Copper: Business has been done to a moderate extent, but there is no new feature in the market. Speculation here is, and for a long

time has been, quite dormant. Chili bars have been done at 69L on the spot, and 69L 15s. for distant arrival; ores and regulus, 14s. to 14s. 3d.—Tin is firm, at 90L for Straits; English sells a little below list prices, though smelters are bare of stocks, and a large consumption goes on at the tin-plate works. Stocks of foreign tin steadily decline, and shipments to Europe of late are trifling, being from Singapore and Penang to London only 166 tons in the five weeks ending October 3, which is the latest date we have.

THE COPPER TRADE.—Messrs. Vivian, Younger, and Bond (Nov. 22) write:—The Liverpool market for Chili produce has been unsettled and uncertain. Transactions have been confined within very narrow limits, in consequence of the divergence of views held by buyers and sellers. Some parcels of bags to arrive up to February have found buyers at 69L 15s. and 70L, which must be considered speculative prices. There are no cash sales of any importance to record. About 800 tons of ore and regulus have been sold at 14s. 3d. The market for English copper is extremely dull, with sellers of tough at 77L, London spot and best selected at 77L, and business would have been possible at even somewhat lower prices. Nothing whatever passing in fine foreign.

The MINING SHARE MARKET has participated in the general dullness this week, and the business transacted has been of a very limited character, and without much change in quotations. The standard for copper ore was up 2L 8s. on Thursday, which is a very favourable feature. The shares mostly dealt in since our last have been Prince of Wales, Chontales, Maes-y-Safn, West Chiverton, Chiverton Moor, Wheal Seton, Wheal Grenville, Retallack, Wheal Basset, North Treskerby, Tincroft, North Crofty, Clifford Amalgamated, East Gunnislake and South Bedford, Great Laxey, Marke Valley, Great Vor, South Frances, East Russell, and a few other mines. Chontales shares have fluctuated very much during the week, from 1 to 1 1/2 dis. On Thursday they rose to 3 1/2, 4 buyers (4L 10s. paid), and leave off 3 1/2 to 3 3/4. The advices by the Douro, dated Oct. 8, state that some fatal cases of cholera had occurred, and consequently native labour was still scarce; but, as no cases had occurred since Sept. 29, it was hoped the disease was passing away. No remittance of gold, as it was thought better not to break up the cups for September month; but it is stated that the next remittance will be proportionately increased. The general state of the mines is the same as last reported. Prince of Wales shares kept firm, at 52s. 6d. to 53s. 6d., up to Thursday, when they declined to 47s., and leave off 50s. to 52s.; at the meeting, full particulars of which will be found in another column, the accounts showed a profit of 619L 18s. 4d., and a balance of assets over liabilities of 2486L 3s., and a dividend of 1s. per share was declared. The report was of a very favourable character. Since the meeting a small branch, 2 in. wide, has been met with in the 55 cross-cut north, underlying north 1 ft. in a fathom. To the north of this branch the ground is more mineralised than the agents have ever seen it before; and, as it is letting out a great deal of water, the north lode, so long looked for, may not be far off. Clifford Amalgamated, 6 1/2 to 6 3/4; Drake Walls, 4 to 4 1/2; East Basset, 10 to 12; East Caradon, 5 1/2 to 6; East Carn Brea, 2 to 2 1/2.

Great Retallack, 3 to 3 1/2; the No. 1 lode, in the 20 south is worth 3 cwt., and the 20 north 3 cwt., per fathom; lode in rise from No. 2 lode is worth 15 cwt. East Gunnislake and South Bedford, 30s. to 35s.; East Russell, 8 to 8 1/2; East Russell, 33s. to 35s.; Frontino and Bolivia, 17s. 6d. to 20s.; Great Laxey, 17 to 18; Great South Tolgus, 4 to 4 1/2; Herodford, 38 to 40; Marke Valley, 6 1/2 to 6 3/4; New Seton, 50 to 60; North Chiverton, 4 1/2 to 4 3/4; North Crofty, 2 1/2 to 3; North Downs, 17s. 6d. to 20s. South Basset, 5 to 7 1/2; the 75, east of cross-cut, on Teague's lode, is worth 8L per fathom; and the 60, east of engine-shaft, on Pryce's lode, 8L per fathom. Maes-y-Safn, 29 to 31; West Drake Walls, 6s. to 8s.; North Treskerby, 33s. to 35s.; Providence Mines, 29 to 30; South Frances, 31 to 33; Tincroft, 13 1/2 to 14 1/2; West Basset, 30s. to 35s.; West Caradon, 6 1/2 to 7 1/2; West Chiverton, 69 to 71; West Prince of Wales, 10s. to 12s. 6d.; West Seton, 180 to 190; West Wheal Kitty, 4 to 4 1/2; Wheal Basset, 90 to 95; Wheal Chiverton, 5 to 5 1/2; Wheal Grenville, 23s. to 25s.; Wheal Many Ann, 19 1/2 to 20 1/2; Wheal Seton, 97 1/2 to 102 1/2. Great North Downs, 4 1/2 to 4 3/4; the lode in Sleggan's shaft is worth 30L per fm., with an improved appearance; two stopes in the 86 west, 50L per fathom; the winze below the 70, from 15L to 20L per fathom; and the 70 east, 20L per fathom.

Wheal Kitty (St. Agnes), 2 1/2 to 3 1/2; at the meeting a dividend of 425L 10s., or 2s. per share, was declared. The prospects of the mine continue good, and the manager states he will sell for the ensuing quarter 47 tons of tin. South Condurrow, 12s. to 14s.; the mine continues to improve, and the lode in the 50 is valued at 15L to 20L per fathom. Gawton Copper, 34 to 35; the south part of the lode, in the 70 fm. level cross-cut, is in a fine lode of black oxide and yellow copper ore, 5 feet wide, and the cross-cut will be continued to intersect the north part. The 60 east is worth 3 tons, a winze 4 tons, the winze below the 50 fm. level 8 tons, a winze in the back of the 50 fm. level 6 tons, and the 50 west 5 tons. The next sampling is expected to exceed the last. Devon Great Consols, 420 to 430; the directors have declared a dividend of 7L per share (7168L), out of profits made in July and August last, after payment of which there remains in hand a balance of 18,266L 18s. 11d. in cash and ore bills. Carn Brea, 25 to 27 1/2. Chiverton Moors, after declining to 5 1/2 sellers, rose to 6, 6 1/2; no call, we understand, was made at the meeting, and the mine looks well.

The Market for Mine Shares on the Stock Exchange has been very quiet during the week, but the tone has been more favourable than in the railway and other markets. British mines command a fair share of attention, and foreign mines are steady. Don Pedro, St. John del Rey, and Chontales, have been most dealt in. A call of 10s. per share has been made in the latter company, and the advices received to-day announce no fresh features at the mines, and no further deaths had occurred for about six days prior to the despatches being sent off. No gold has been forwarded, but it is anticipated that a remittance will be made by the next mail; price 1 1/2 to 1 dis.; St. John del Rey, 59 to 61; Don Pedro, 2 to 2 1/2 prem.; Anglo-Brazilian, par to 4 prem.; Anglo-Italian, 4 to 4 1/2 prem.; Pestarena, 4 dis. to 4 1/2 prem.; Frontino and Bolivia, 17s. to 19s.; Rossa Grande, 4 to 4 1/2; Port Phillip, 13s. 16ths to 15s. 16ths, ex div.; Central American, 4 dis. to 4 1/2; Scottish Mines, 1 to 1 1/4; Cape Copper, 4 dis. to 4 1/2 prem.; Kapunda, 4 to 4 1/2, ex div.; Yudanamatana, 4 to 1. In British mines, West Chiverton has further improved in the bottom level, price 70 to 71. Chiverton Moor, 6 to 6 1/2; no call was made at the meeting. Chiverton shares are unaltered, at 5 to 5 1/2; Prince of Wales shares have recovered to 50s., 52s. Carn Brea shares have been enquired for, at 25 to 27; the prospects of the mine are reported as better than at any time for years past. New Seton shares have risen to 52 1/2, 57 1/2; West Seton, 165 to 170; Seton, 97 1/2 to 100; Great Vor, 17 1/2 to 18; East Caradon, 5 1/2 to 6; Devon Great Consols, 425 to 435; North Chiverton is favourably reported on, price 4 1/2 to 4 3/4; North Wales Mines are more enquired for. The Maes-y-Safn Company have declared a dividend for the quarter of 20s.; price 28 to 30. Minera, 170 to 180, ex dividend. Westminster (Limited) is opening up well; the next sale of ore will be not less than 50 tons, with every prospect of gradual and steady increase.

At Truro Ticking, on Thursday, 4033 tons of ore were sold, realising 17,932L 2s. 6d. The particulars of the sale were:—Average standard, 113L 8s.; average produce, 6 1/2; average price per ton, 4L 8s. 6d.; quantity of fine copper, 254 tons 15 cwt. The following are the particulars of the sales during the past month:—

Date.	Tons.	Standard.	Produce.	Per ton.	Per unit.	Ore copper.
Oct. 17	3710	115 5 0	6 1/2	£4 7 0	14s. 1 1/2d.	£70 14 0
" 24	1498	102 0 0	8 1/2	5 18 0	13 1 1/2	69 10 0
" 31	2073	101 9 0	8 1/2	5 7 0	13 4	66 14 0
Nov. 7	1841	110 0 0	8 1/2	3 18 0	12 9	63 14 0
" 21	4033	113 8 0	6 1/2	4 8 6	13 1 1/2	69 17 0

Compared with the last sale, the advance has been in the standard 2L 8s., and in the price per ton of ore about 3s. Compared with the corresponding sale of last month, the decline has been in the standard 17s., and in the price per ton of ore about 1s.

IRISH MINE SHARE MARKET.—The tone of our market for speculative securities has throughout the week been devoid of animation, and Mining Shares suffered neglect in common with all others. General Mining Company for Ireland was, in number of transactions, most dealt in at the previous quotation of 2L per share—once touching an improvement on this of 2s. 6d. for account, and leaving off in

request at these quotations. Wicklow Copper shares were also repeatedly dealt in, but at a reduction of 20s. per share on last week's price, having changed hands at 177. (27. 10s. paid), leaving off buyers. Mining Company of Ireland shares were enquired for at 167. 10s. (77. paid), but holders are firm at 177. per share. Connors shares (77. paid), but holders are firm at 177. per share. Connors shares (77. paid), but holders are firm at 177. per share. Connors shares (77. paid), but holders are firm at 177. per share.

The directors of the Devonshire Great Consolidated Copper Mining Company, at their board meeting, held yesterday, declared a dividend of 7168s. 7d. per share, arising from profits on sales of copper ore sampled in the month of July and August last. After payment of the same there remains in hand a balance of 18,266l. 18s. 11d. in cash, ore bills not at maturity, and reserved fund, applicable to the general purposes of the company.

At Wheal Kitty (St. Agnes) meeting, on Tuesday (Mr. T. Reece in the chair), the accounts showed a profit on the three months' operations of 400l. 10s. 3d., and a balance of assets over liabilities of 850l. 8s. 4d. A dividend of 420l. 10s. (2s. per share) was declared, leaving 420l. 18s. 4d. to be carried forward to the credit of the next account. Details in another column.

At Alderley Edge Mining Company general meeting, held at the mines, on Oct. 31, a further dividend of 5s. per share was declared, making the total amount of dividend 9l. 2s. 8d. per share.

At the Prince of Wales Mine meeting, on Tuesday (Mr. J. Y. Watson, F.G.S., in the chair), the accounts showed a credit balance of 2486l. 3s. 6d. on the three months' operations amounted to 619l. 18s. 4d., notwithstanding the workings were impeded for a period of something like six weeks, by which it is estimated the returns during the quarter were reduced by at least 100 tons. Details in another column.

At West Basset Mine meeting, on Wednesday, the accounts showed a balance carried over from last meeting, 581l. 19s. 1d.; costs for August and September, 1937l. 7s.; advance on tribute, 150l.; royalty, 128l. 13s. 10d.; sundries, 30l. 6s. 2d.;—2828l. 6s. 1d. Copper ore sold, 821l. 12s. 1d.; tin ore sold, 1114l. 18s. 3d.; advance on tribute, 180l.; calls received, 606l.; balance, 1057l. 8s. 9d.—2828l. 6s. 1d.—Mr. Finch, the solicitor, attended the meeting, and commended the further steps that had been taken in reference to the assessment of the damages to be paid by the South Frances adventurers, and that he expected very shortly to receive the Judge's Order to proceed with the reference.

At North Wheal Chiverton meeting, to be held on Thursday, the accounts will show a credit balance of 3158l. 5s. The average cost of driving levels for the three months was 3l. 18s. per fm., and the average earnings of the workmen was 3l. 4s. 8d. per man per month.

At Wheal Owles meeting, on Nov. 15, the accounts for July, August, and September showed a debit balance of 4998l. 9s. 5d. The tin sold (less dues, 1-35th—190l. 14s. 3d.) realised 4577l. 1s. 5d. Work performed during the quarter: Driven in levels, 148 fms. 1 ft. 3 in.; sunk in shafts and winzes, 22 fms. 0 ft. 9 in.; 29 pares stoving on tut for tin; and 22 pitches on tribute. They have about 120 tons of tin unsold.

At Caru Brea Mine committee meeting, on Nov. 12, there was a report of nearly 4000 shown upon the two months ending August. The report is perhaps the most satisfactory presented for years. On the Highbarrow lode alone there are three winzes and two ends, worth for tin and copper for 450l. to 500l. per fm., in the aggregate. Other parts of the mine have improved, and are still improving. The Druid's part is opening out well. With a continuance of the present energetic mode of working the mine, as promoted by Mr. Francis Pryor, the adventurers need not fear but Caru Brea will, before long, with an advance in tin, resume paying dividends. The sett is very extensive, and there is a great deal of profitable unexplored ground to open. At the next bi-monthly committee meeting it is expected there will be a much larger credit balance. A letter was read from Mr. F. Pryor recommending the tendering for the materials required for the mine. The committee expressed their concurrence in such views, and for a commencement of the system directed that tenders be invited for all the stamps work of the mine for six or twelve months, and that at the next committee meeting lists be produced of the several kinds of materials required for the use of the mine, and estimates of the quantities required for six or twelve months. Mr. Pryor also requested the directors to convene a meeting to deal with the financial position of the company, and to make such call as may be necessary to place the mine in an independent position.

At New Chiverton Consols Mine meeting, yesterday (Mr. F. Handley in the chair), a call of 2s. per share was made. Captain Evans was appointed agent. It was resolved to divide the mine into 1500 shares, the whole of which have been taken up.

At the Polidice Mines meeting, on Tuesday, the accounts showed a debit balance of 1054l. 9s. 4d. It was resolved that the mines be carried on upon the Cost-book System, and divided into 2000 shares. Sir William Williams, Bart., was elected the unpaid purser and treasurer, and an unpaid committee of management was also elected. Major Bickford was appointed Chairman, and Messrs. G. A. Michell and W. H. Tregoning the Vice-Chairmen of the committee. That for the payment of the purchase-money of these mines, balances and material amounting to 6300l., a call of three guineas per share be made; and, for the payment of the debit balance of 1054l., a call of 10s. per share be made.

At Otta Copper Mining Company meeting, on Nov. 28, Messrs. T. Stanton, J. V. Smedley, J. H. Durham, Parke Pittar, and J. D. Ronaldson will be nominated liquidators to wind-up the company.

The Bank of England return for the week ending on Wednesday evening showed in the ISSUE DEPARTMENT a decrease in the "notes issued" of 62,790l., which is represented by a corresponding decrease in the "coin and bullion" on the outside of the account. In the BANKING DEPARTMENT there is shown an increase in the "other deposits" of 362,910l., and in the "rest" of 2629l.; together, 365,539l.; a decrease in the "public deposits" of 91,256l., and in the "seven day and other bills" of 28,882l.; together, 120,138l.—245,501l.; and adding thereto the decrease of 1656l. in the "other securities" on the asset side of the account, there is shown an increase in the total reserve of 247,157l.

On the Stock Exchange there has been an active demand for Mining Shares during the week. The following prices were officially recorded in British Mining Shares:—Great Laxey, 177, 177; Great Wheal Vor, 18; North Wheal Crofty, 21, 21; Devon Great Consols, 427, 430; East Caradon, 61;—In Colonial Mining Shares the prices were:—Cape Copper, 6 15-16ths, 7, 7; Port Phillip, 1 3-16ths, 1, 1; 1 3-16ths, 1; Yudanamutana, 1; Scottish Australian, 1;—In Foreign Mining Shares the prices were:—Alamillos, 1; Chontales, 2, 2, 3, 2, 2, 2; Don Pedro, 2, 2, 1, 2, 2, 2; St. John del Rey, 60, 60; Anglo Brazilian, 1 9-16ths; United Mexican, 1, 15-16ths; Frontino and Bolivia, 2; Pestarena, 2 9-16ths, 2, 2.

COAL MARKET.—The fresh arrivals this week number 120 ships. The cold, stormy weather has greatly increased the demand for house coals, and a large business has been done at 6d. per ton advance on last week's prices. Hartley's have also been in fair request, at an advance of 3d. Hetton Wallend, 22s.; Braddyll's Wallend, 20s. 6d.; Eden Main, 19s. 6d.; Riddell's Wallend, 19s.; Holywell Main, 18s. 6d.; West Hartley, 18s. 6d.—Unsold, 18 cargoes: 5 ships at sea.

EXPORTS OF COAL.—By the Monthly Circular of Messrs. Higginson, Liverpool, we learn that the quantity of coal exported in Oct. was 996,852 tons, against 859,578 tons in the corresponding month of 1866, showing an increase of 127,274 tons. The particulars are:—From the Northern Ports, 461,719 tons; Yorkshire, 36,642 tons; London, 9761 tons; Liverpool, 92,894 tons; Severn Ports, 310,429 tons; and Scotch Ports, 75,407 tons. The increase was:—Northern Ports, 59,722 tons; London, 4006 tons; Liverpool, 28,976 tons; Severn Ports, 22,187 tons; Scotch Ports, 17,504 tons. The decrease—Yorkshire, 5121 tons. Total, Jan. to Oct., 8,282,087 tons; same period last year, 8,018,009 tons; showing an increase of 264,078 tons.

CHONTALES.—The advices received by the West India Mail inform the directors that, although several fatal cases of cholera have occurred at the mines, it would appear the disease is passing away, as no case occurred between Sept. 29 and Oct. 8, so that it may be expected that the natives will soon return to their employment. The company has been peculiarly unfortunate in the hindrances that have prevented the effective development of the mines, and the making of those returns which, from the reports presented at the last meeting, were in course of realisation. There is nothing whatever in the reports just received that in any way affects the intrinsic value of the mines; therefore, it is to be hoped that the speedy acquisition of labour will rapidly open out the properties in a satisfactory manner. The mines must be in a position very similar to what they were when Mr. Truran left Nicaragua; and those who attended the last meeting, or pursued its details, will recollect the strong opinion Mr. Truran expressed upon their productive character, when he affirmed that the samples, which he himself broke, were a fair average of the ore at the various points of operation. It should be remembered that, until the levels are sufficiently opened out to enable the productive parts of the lodes to be worked, the mills must necessarily be supplied with the poorer character of stuff obtained from the shafts and levels, some of which the mills now appear to be grinding. No remittance of gold has come to hand, as it was thought better not to break up the cups for September, but it is stated the next remittance will be proportionably increased. The next mail, it is hoped, will bring satisfactory intelligence.

FRONTINO AND BOLIVIA (SOUTH AMERICAN) GOLD MINING COMPANY.—The Douro brings the advices from Mr. Rouch, the company's manager, which ought to have arrived by the last mail. The intelligence communicated is of a most favourable character. The gold (some 1200 ozs.) is expected next week by the regular West India packet.

THE MINING JOURNAL.

Contract for Coals for Gibraltar.
CONTRACT DEPARTMENT, ADMIRALTY, SOMERSET HOUSE.

THE COMMISSIONERS for Executing the Office of Lord High Admiral of the United Kingdom of Great Britain and Ireland, do hereby give notice that on TUESDAY, the 17th December next, at Two o'clock, they will be READY TO TREAT with such persons as may be willing to CONTRACT for SUPPLYING and DELIVERING into store at Her Majesty's Naval Yard at Gibraltar,

ELEVEN THOUSAND FIVE HUNDRED TONS OF SMOKELESS SOUTH WALES COALS,

For the service of Her Majesty's steam-ships and vessels. The coals to be shipped as follows:—1600 tons thereof by the 31st January, 1868; 1600 tons more thereof by the 28th February, 1868; and the remainder thereof in nine equal monthly proportions.

A form of the tender and conditions of contract may be seen in the lobby of the Storekeeper-General's Department, Admiralty, Somerset House. No tender will be received after Two o'clock on the day of treaty, nor will any be noticed unless the party attends, or an agent for him duly authorised in writing.

Every tender must be addressed to the Secretary of the Admiralty, and bear in the left-hand corner the words "Tender for Coals for Gibraltar," and must also be delivered at the Department of the Storekeeper-General, Admiralty, Somerset House, accompanied by a letter signed by two responsible persons, engaging to become bound with the person tendering in the sum of £25 per cent. on the value for the due performance of the contract.

By order, ANTONIO BRADY, Registrar of Contracts and Public Securities. Contract Department, Admiralty, Somerset House, Nov. 19, 1867.

Tower-Sale of Stores.
BY ORDER OF THE SECRETARY OF STATE FOR WAR.

MR. GEORGE SPILLMAN WILL SELL, BY PUBLIC AUCTION, in the TOWER, on Monday, 24th of December, 1867, at Eleven o'clock in the forenoon precisely, the following STORES:—COPPER TUBE BOXES. ENGINE HOSE. BRASS. FIRE ENGINES. IRON.

May be viewed at the Tower from Ten to Four o'clock, the three days previous to the day of sale, and catalogues may be had at the War Office, Pall Mall; the Tower; and Royal Arsenal, Woolwich.

SLATE SLABS.

TENDERS WANTED FOR SUPPLYING about ONE HUNDRED TONS ANNUALLY of 1 in. 1 1/4 in., and 1 1/2 in. SLATE SLABS, planed on both sides, and sawn on edges. State lowest prices for the various lots, sizes, and qualities, and how soon a cargo could be shipped, to—ALEXANDER YOUNG, Manager, STONE DEPOT, BOTHWELL STREET, GLASGOW.

COLLIERY MANAGER.—WANTED, for a small COLLIERY AND COKE WORKS, an EFFICIENT MANAGER, to take the superintendence of the same. He will be REQUIRED TO UNDERTAKE THE SALES OF COALS AND COKE, both inland and shipping. Parties acquainted with Newport and its district (where his headquarters would be) would be preferred. Application, with testimonials and salary expected, to be made to the Secretary of the Holybush Coal and Coke Works Company (Limited), No. 8, Abchurch Lane, London, E.C.

SECRETARY.—WANTED, a GENTLEMAN, of first-rate business qualifications and strict integrity, having a sufficiently numerous connection to enable him to add very materially in the floating of an exceedingly VALUABLE AND EXTENSIVE MINING PROPERTY in the WEST OF ENGLAND, where a pretty large capital will be required. Address, "X. Y. Z.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

PARTNERSHIP.—AN EXCELLENT OPPORTUNITY is offered to a PRACTICAL ENGINEER, to enter upon an ironfoundry and machine-tool business, which has been carried on in a country town for many years, and where the present proprietor is willing to give up in favour of the chief of his staff, leaving the engines, machines, and plant in, at a valuation to be included in rent, with the option of purchase after three years. A partner is wanted with £1000 or £1500. Address, MR. JOHN DAVIS, 17, Northgate-street, Aberystwith, Mid-Wales.

ITALY.—AN ENGLISH GENTLEMAN, a long resident in Italy, possessing all the necessary influence and means to conclude business, will be happy to ACT for an ARMY or NAVY CONTRACTOR, or for any party desirous of being well represented. Address, in the first instance, with full name and particulars, to "B. C.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

TO MERCHANTS, ACCOUNTANTS, AND OTHERS.

WANTED, by the ADVERTISER, a SITUATION as CLERK. Well qualified, and can be highly recommended. Salary expected very moderate. Age 26 years. Apply to "Trebo," Post Office, Neath.

MINES AND QUARRIES.—A GENTLEMAN, who has had great experience in the management of mines and slate quarries, is OPEN TO AN ENGAGEMENT as MANAGER or SECRETARY to a first-class company. He can level, survey, and understands the erection of machinery. First-class testimonials. Address, "X. Y. Z.," care of Mr. Robert Jenkins, St. George's Cottage, Hill, Torquay.

A GENTLEMAN, having a LONG and EXTENSIVE EXPERIENCE in the MANAGEMENT of MINES in CORNWALL, is OPEN TO AN ENGAGEMENT ABROAD as GENERAL MANAGER or SUPERINTENDENT OF MINES. Unexceptionable references. Address, "F. G. S.," Post Office, Truro.—August 29, 1867.

WANTED, by a gentleman in the Iron Trade, a GOOD AGENCY for the SALE of PIG IRON in the SOUTH STAFFORDSHIRE DISTRICT. Address, "P. E.," Metal Broker, Exchange, Birmingham.

COLLIERY, SOUTH WALES.—TO BE SOLD, BY PRIVATE CONTRACT, an UNDIVIDED SHARE of an OLD-ESTABLISHED COLLIERY, in good working order, and yielding a profit of 20 per cent. per annum. The purchaser may become either a dormant or an active partner, at his option. For full particulars and price, apply to DAVID LLEWELLYN, Esq., Manager, Agent, Glamorgan Office, Pontypool.

TO GRANITE MERCHANTS.—FOR SALE, the NORTH HAYTOR GRANITE QUARRY, situated a mile from the Bovey Railway Station and ten miles from the port of Teignmouth. The GRANITE is in masses of very large dimensions, and of superior quality. For particulars and orders to view, apply to Mr. HENRY BLANCHFORD, Broker and Accountant, Teignmouth.

LANFAIR GREEN AND BLUE SLATE QUARRY COMPANY (LIMITED).—Manager, T. HARVEY, Esq.—TO BE SOLD, FORTY SHARES, at £1 per share. No calls.—Address, "A. B.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

FOR SALE, a PORTABLE STEAM ENGINE of 25 horse power. Winding gear to order to suit circumstances. SECOND-HAND PORTABLE STEAM ENGINES, with new MORTAR MILLS, SAW TABLES, &c., on advantageous terms. Apply to Messrs. BARROWS and CARMICHAEL, Engineers, Banbury, Oxon.

ON SALE, THREE EGG-END BOILERS, 36 ft. long by 6 ft. diameter, in EXCELLENT CONDITION, and will work up to 60 lbs. pressure. Apply to Mr. WILLIAM CLARK, 422, Rochdale Road, Manchester.

CHONTALES GOLD AND SILVER MINING COMPANY (LIMITED).—Notice is hereby given, that the directors have this day made a CALL of TEN SHILLINGS PER SHARE, payable at the Imperial Bank, Lothbury, on or before the 23rd day of December, 1867. The Transfer-books will be closed from the 26th to the 26th of November, both days inclusive. By order, J. JAMESON TRURAN, Secretary.

185, Gresham House, Old Broad-street, London, E.C., Nov. 18, 1867. By the Articles of Association calls in arrears are subject to interest at the rate of 10 per cent. per annum.

ANGLO-MEXICAN MINT COMPANY.—Notice is hereby given that a DIVIDEND will be PAYABLE at this office on and after MONDAY, Dec. 2 next; claims to be made (printed forms of which may be obtained at the office) two clear days previous to payment. Attendance 11 to 3 o'clock. No. 4, Finsbury-place, South, Nov. 18, 1867. ALFRED GODFREY, Secretary.

ANGLO-MEXICAN MINT COMPANY.—Notice is hereby given, that all HOLDERS of SHARE CERTIFICATES are required to deposit the same in this office at the time of making their claim for the DECEMBER DIVIDEND, in order that a new series of dividend coupons may be attached thereto. A receipt will be given at the time of delivery, to be afterwards exchanged for the said certificates when ready to be returned, whereof due notice will be given by public advertisement. ALFRED GODFREY, Secretary.

No. 4, Finsbury-place South, Nov. 18, 1867.

STEAM-BOILERS made by WILLIAM WILSON, LILYBANK BOILER WORKS, GLASGOW, on the most improved principles, for home and export. All boilers made of the best material and workmanship, proved and warranted tight under a high pressure, and delivered at any railway station or shipping port in the kingdom at moderate rates. Lithograph of boilers forwarded post-free on application.

MR. THOMAS SPARGO, STOCK AND SHAREDEALER, 224 & 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C.

THE IMPERIAL SILVER QUARRIES COMPANY (LIMITED). Mr. SPARGO has for sale a number of Debenture Bonds, bearing 10 per cent. interest per annum, in the above undertaking. These Bonds are redeemable in 1869, and the estimated net profit upon the first year's working is £250,000. Full particulars on application personally, or by letter. Gresham House, Old Broad-street, London, E.C.

CENTRAL AMERICAN RAILWAY COMPANY.—An offer is solicited for First Mortgage Bonds of £200 each in the above undertaking. Apply to Mr. THOMAS SPARGO, Gresham House, Old Broad-street, London, E.C.

WANTED TO PURCHASE, FIVE HUNDRED SHARES in the OLD WESTMINSTER MINE, at 4s 10s. Address, "M. J.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

MESSRS. KEANE AND CO., MINING AGENTS, AND SHAREDEALERS, 90, CANNON STREET, LONDON, E.C., and BRIDGEWATER CHAMBERS, BROWN STREET, MANCHESTER.

LEAD ORES.
Date. Mines. Tons. Amount. Purchasers.
Nov. 7—Cardiganshire.....30.....£11 8 0.....Sims, Williams, & Co.
15—Great Laxey.....100.....22 5 6.....R. Michell and Son.
19—Slipstones.....65.....12 1 0.....Sims, Williams, & Co.
21—Frank Mills.....100.....13 2 0.....Bury Port.

COPPER ORES AND REGULUS
Sampled 5th and 6th November, and sold at Liverpool, 20th November, 1867, by Mr. JAMES LEWIS.

Lot	Description.	Tons.	Price.	Purchaser.
1—	West Canada ore, Pennsylvania	50	£16 3 0	Sims, Williams, & Co.
2—	ditto	68	13 4 6	Newton, Keates, & Co.
3—	ditto	49	15 17 0	ditto
4—	ditto	73	13 6 0	Vivian and Sons.
5—	ditto	42	16 3 0	Sims, Williams, & Co.
6—	ditto	26	17 4 0	ditto
7—	ditto	26	14 7 0	ditto
8—	ditto	53	16 4 0	ditto
9—	ditto	47	14 0 6	Newton, Keates, & Co.
10—	Canadian ore, Quebec	11	15 11 0	Sims, Williams, & Co.
11—	California ore, Cremorne	100	10 19 0	Vivian and Sons.
12—	ditto	100	11 1 6	Newton, Keates, & Co.
13—	ditto	100	10 17 6	ditto
14—	ditto	100	10 19 0	Vivian and Sons.
15—	ditto	100	11 0 0	Newton, Keates, & Co.
16—	Chile regulus, G. Grenfell	65	26 8 0	Sims, Williams, & Co.
17—	ditto	65	26 9 6	J. Bibby, Sons, & Co.
18—	ditto	65	26 10 6	Williams, Foster, & Co.
19—	ditto	65	26 10 6	Newton, Keates, & Co.
20—	ditto	65	26 10 6	Williams, Foster, & Co.
21—	ditto	65	26 10 6	ditto

Sold at LIVERPOOL, from Nov. 1 to Nov. 14.

Messrs. Piteairn-Campbell and Co. (Nov. 15) write.—The market has been very steady throughout the fortnight, with a fair demand both from the trade and exporters, and there is every appearance of the same continuing. Quotations are 69l. to 69l. 10s. for bars, 14s. for ore and regulus, 76l. for ingots, and 15s. for Bullion. The sales reported in the fortnight amount to 1191 tons bars, 810 tons regulus, 733 tons ore, 4 tons Bullion.

Mine or ship.	Tons.	Price.	Mine or ship.	Tons.	Price.
Bars—Beatrice	70	£68 0 0	Ore—Mandanau	150	£ 0 14 0
Reg.—Stranger	200	0 14 0	Reg.—Mandanau	363	0 14 0
Bars—Valparaiso	45	68 0 0	Bars—River Avon	130	69 0 0
"Cubana	32	68 5 0	"Uncas	114	68 10 0
"Second hands	100	68 0 0	Ore—Zeta	93	0 14 0
"River Avon	50	68 0 0	Reg.—Zeta	247	0 13 7 1/2
"Second hands	175	68 0 0	Ore—Warwickshire	490	0 14 0
"Uncas	200	68 10 0	B'lia—Charlotte Clark	4	0 15 3
"Delaware	100	69 10 0	Bars—Lieut. Maury	50	69 0 0
"Delta	25	69 0 0	Prince Alfred	100	69 5 0

Arrivals here during the fortnight—Polestar, from Valparaiso, 140 tons bars; Glenecoyne, from Valparaiso, 65 tons bars; Quenteros, from Islay, 272 tons ore; Mandanau, from Tocopilla, 150 tons ore, 363 tons regulus, 45 tons Bullion; Aconagua, from Valparaiso, 90 tons bars; Donnikler, from Guayaquil, 500 tons ore, 150 tons ingots; the Theta, from Lota (at Swansea), 575 tons bars, 237 tons ingots. Stocks of copper (Chilian and Bolivian) in first and second hands, likely to be available, are—Ores. Regulus. Bars. Ingots. Bullion.

Liverpool.....2760.....2543.....4507.....543.....163
Swansea.....1857.....128.....782.....782.....64
Havre.....—.....—.....3740.....420.....—
Total.....4617.....2680.....8965.....1755.....227
Representing about 13,000 tons fine copper, against 14,350 tons Nov. 15, 1866 12,950 tons Nov. 15, 1865; and 12,500 tons Nov. 15, 1864.

COPPER ORES.
Sampled Nov. 6, and sold at the Royal Hotel, Truro, Nov. 21.

Great Consols	129	£5 3 6	Bampfylde	51	£3 2 0
ditto	129	4 5 6	Wheal Friendship	89	2 4 6
ditto	128	5 5 6	ditto	34	4 17 6
ditto	123	4 11 6	ditto	11	12 10 0
ditto	122	4 11 0	West Maria & Fortes	71	2 4 6
ditto	120	5 7 6	ditto	34	1 13 6
ditto	119	3 7 6	ditto	23	4 19 6
ditto	117	4 13 0	Wheal Emma	44	2 5 6
ditto	109	3 7 6	ditto	34	4 4 0
ditto	98	4 14 6	ditto	27	5 2 6
ditto	95	3 9 0	ditto	22	8 18 0
ditto	85	4 18 6	East Russell	56	3 17 6
ditto	80	4 13 0	ditto	45	3 7 6
ditto	72	5 4 6	ditto	25	6 1 6
ditto	47	3 8 0	Devon and Cornwall	53	4 17 6
ditto	46	3 7 6	ditto	48	3 18 0
ditto	40	12 5 6	ditto	24	1 9 6
ditto	35	1 6 6	Prince of Wales	48	5 11 0
ditto	16	5 3 6	ditto	37	5 16 0
Marko Valley	89	2 14 6	ditto	55	6 4 6
ditto	85	4 18 6	Gunnislake (Clitters)	30	5 2 6
ditto	85	3 2 6	ditto	36	4 18 6
ditto	60	4 13 6	ditto	18	0 17 6
ditto	41	1 14 0	Bedford United	44	3 13 0
ditto	39	2 17 6	ditto	37	3 0 6
ditto	38	2 3 6	Belstone Mine	34	8 9 6
Hingston Down	96	3 14 6	ditto	24	3 7 6
ditto	86	3 0 0	New East Russell	49	6 2 6
ditto	84	2 19 6	Caradon Consols	35	4 7 0
East Caradon	87	3 6 6	Wheal Polmar	39	2 13 6
ditto	86	2 17 6	Molland	29	3 6 6
ditto	47	2 7 6	Kelly Bray	20	2 16 6
Bampfylde	101	11 14 0	Collacombe	14	1 17 6
ditto	60	11 12 0	Furdon	12	5 19 6

WATSON BROTHERS' MINING CIRCULAR.
WATSON BROTHERS,
 MINING AGENTS, STOCK AND SHARE DEALERS, &c.
 1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

MESSESS. WATSON BROTHERS beg to notify to their friends and the public generally that Mr. W. H. CUELL has retired from the firm, in accordance with a clause in the deed of partnership; and having also sold to the remaining partners all his right, property, and interest in the business hitherto carried on by J. Y. WATSON, F.G.S., NAPOLEON FREDERICK WATSON, and himself, under the name of "WATSON and CUELL," the same will be carried on in future by Mr. J. Y. WATSON and Mr. N. P. WATSON, under the designation of "WATSON BROTHERS," and they take this opportunity to return their most sincere thanks for the great patronage bestowed and confidence reposed in the firm for 24 years, and to assure their friends and clients it will be their earnest endeavour to merit a continuance of both.

Messrs. WATSON BROTHERS have made arrangements for continuing their weekly Circular, which has had a large circulation for many years, to the columns of the *Mining Journal*, their special reports and remarks upon mines and mining, and state of the sharemarket, will in future appear in this column.

In the year 1843, when Cornish mining was almost unknown to the general public, attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. J. Y. WATSON, F.G.S., author of "Gleanings among Mines and Miners," "Records of Ancient Mining," "Cornish Notes" (first series, 1862), "Cornish Notes" (second series, 1863), "The Progress of Mining," with statistics of the Mining Interest, annually for 21 years, &c., &c. In the Compendium, published in 1843, Mr. WATSON was the first to recommend the system of a "division of small risks in several mines, ensuring success in the aggregate," and Messrs. WATSON BROTHERS have always a selected list on hand. Perhaps at no former period in the annals of mining has there been more peculiar need of honest and experienced advice in regard to mines and share dealing than there is at present; and, from the lengthened experience of Messrs. WATSON BROTHERS they are emboldened to offer, thus publicly, their best services to all connected with mines or the market, as they have for so many years done privately, through the medium of their own Circular.

Messrs. WATSON BROTHERS transact business in the purchase and sale of mining shares, and other securities, payments of calls, receipt and transmission of dividends, obtaining information for clients, and affording advice, to the best of their knowledge and judgment, based on the experience of more than 30 years active connection with the Mining Market.

Messrs. WATSON BROTHERS also inform their clients and the public that they transact business in the public funds, railway, docks, insurance, and every other description of shares dealt in on the Stock Exchange.

Messrs. WATSON BROTHERS are also asked their opinion of particular mines, as well as to recommend mines to invest or speculate in, and they give their advice and recommend mines to the best of their judgment and ability, founded on the best practical advice they can obtain from the mining districts; but they will not be held responsible, nor subject to blame, if results do not equal the expectations they may have held out in a property so fluctuating as mining.

Messrs. WATSON BROTHERS having agents and correspondents in all the mining districts, and an extensive connection among the largest holders of mining property, have the more confidence in tendering their advice on all matters relating to the state and prospects of mines and mining companies, and are able to supply shares in all the best mines at close market prices, free of all charge for commission.

COOK'S KITCHEN.—This mine never looked better. The bottom level east is worth nearly 100l. per fathom, and a winze is worth 150l. per fathom. The mine will now make profit.

WEST FRANCES.—The great point here is sinking the engine-shaft 8 fathoms deeper, where the intersection of the engine and south lodes will take place, and the agents are very confident of success.

At GOMANNA there is a good lode in the 114 west, on Venning's, and about 40 tons of copper ore (15 tons of good quality), will be sampled Dec. 2.

PRINCE OF WALES.—The report at the meeting will show the mine never had better prospects than at present, and as the shareholders were aware that the want of water stopped the works for six weeks, the lessened dividend was fully expected, and we believe the sudden fall in shares was owing to a heavy "bull" account, as the mine is looking much better.

WHEEL CREBOR. is looking better in the 108, on the north lode; and a winze sinking below the 96, in a part of the lode is worth 100l. per fathom. The committee have been striving very much to get a reduction of royalty, so as to offer a little encouragement to the shareholders to persevere in the works, but all idea of reduction has been refused by the agents of the Duke of Bedford. Two companies of shareholders have spent 35,000l. on the property without deriving any benefit, but the Duke of Bedford has received thousands of pounds in royalties, and there can be no doubt that the want of liberality on the part of the lords of mines generally is sending much capital abroad which would otherwise benefit Cornwall and Devon.

EAST DARNLEY. continues to look well, and is returning about 75 tons of lead ore per month, at a profit of 300l.

The **LISBURNE MINES** are yielding 220 to 240 tons of lead ore per month, and making a profit of 500l. to 600l. per month.

At **CWM ERFIN** the stopes are turning out well, the ends are rather poor, but improvements are looked for eastward. The returns are about 60 tons of lead ore a month, and the profit 300l.

SOUTH BASSET.—Two of the ends in this mine have now improved to 8l. per fathom each.

MAES V. S. A. continues to look well, and the quarterly dividend, early in December, will be 1l. per share. The returns are 200 tons of lead ore per month.

SATURDAY, NOV. 16.—The market to-day is very flat. Chontales shares down to 1s. 6d., owing to the reported death of Sir Charles Kirkpatrick. Grenville shares declined to 22s., 21s. Prince of Wales, 51s. to 50s.; Chilverton Moor, 54½ to 54; West Chilverton, 69 to 71; Maes-y-Safn, 29 to 31.

MONDAY, NOV. 18.—Market very quiet indeed, and prices generally less firm. Chilverton Moor shares advanced to 64½. Chontales flat at 27½. Wheel Seton shares firmer at 100 to 105. Grenville, 22s. 6d. to 25s.; Prince of Wales, 51s. to 52s.; Maes-y-Safn, 29 to 31; East Caradon, 6½ to 6¾; Clifford Amalgamated, 6½ to 6¾.

TUESDAY, NOV. 19.—The market is quiet, but Prince of Wales shares firmer. East Gunnslake and South Bedford shares advanced to 35s., 40s. Chilverton Moor, 54½ to 54; Prince of Wales, 52s. to 54s.; Wheel Grenville, 22s. 6d. to 25s.; Maes-y-Safn, 29 to 31; Chontales, 27½ to 3. East Caradon receded to 6, 6½.

WEDNESDAY, NOV. 20.—The market is dull. Chilverton Moor receded to 5½, sellers, and East Caradon to 5½. Chontales shares advanced to 3, 3½; Prince of Wales, 51s. to 52s.; Maes-y-Safn, 29 to 31; Wheel Seton, 100 to 105; East Gunnslake and South Bedford, 35s. to 40s.; Marke Valley, 6½ to 6¾.

THURSDAY, NOV. 21.—Market continues dull. Prince of Wales shares suddenly receded to 49s., sellers. East Caradon, Clifford, North Treskerry, and North Crofty flat. Chilverton Moor, 54½ to 54; Chontales, 2½ to 2½ 3/4 (4s. 10s. paid); buyers; North Treskerry, 32s. to 34s.; West Chilverton, 69 to 71; Maes-y-Safn, 29; North Crofty, 2½ to 3.

FRIDAY, NOV. 22.—Market much better. Prince of Wales shares rose to 50s., 52s. Chontales buyers, at 1 discount. Carn Ead, 25 to 27. East Gunnslake, flatter. Chilverton Moor again advanced, to 5½, 6½. West Seton, 180 to 190; Seton, 97½ to 102½; East Caradon, 5½ to 6.

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Notices to Correspondents.

* Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be filed on receipt: it then forms an accumulating useful work of reference.

DIFFERENTIAL BAROMETER.—"J. C." (Manchester).—The article by Mr. (now Sir) Goldworthy Gurney, describing his differential barometer, was published in the *Mining Journal* of Aug. 29, 1851. The improvement appears to consist in substituting water for the mercury in the upper part of the column. The differential arrangement consists in the contraction of the upper part of the tube, or that part above the mercury, and in which the water is standing. By this means any number of inches on the scale can be made to represent 1 inch rise or fall of the mercury.

SOUTH RESOLVEN COLLIERY COMPANY.—My attention having been drawn to some enquiries made in the Journal as to the progress of the liquidation of the above company, I have to inform the shareholders through your columns that although the proper time has not yet arrived to submit a statement of accounts, I have, nevertheless, one in course of preparation, which will be shortly issued. Unless, however, the shareholders or creditors contribute funds towards remunerating me for my services, I shall have no alternative but to shortly resign my position to some more philanthropic individual.—THE LIQUIDATOR.

DOES COAL EXIST NEAR LONDON?—"B. F." (Blackman-street).—Nothing of a really practical character has yet been done for deciding its existence or non-existence south of the Thames. Messrs. Mather and Platt, of Manchester, offered, more than two years since, to supply gratuitously the necessary machinery for the trial, but no one came forward to undertake the workings.

WHEEL BULLER, AND ITS MANAGEMENT.—I am glad to find that at last the agents of this mine tell the adventurers the same as I told them—months since, under the cognomen of "A Miner." Time in mining is money, and had the engine been erected at that time, I consider the agents would have acted very much more to the advantage of the adventurers. Again, had the engine been erected at once on Kistie's shaft, the expense of the flat-rods erected since would have been saved. Common sense must tell any practical man that if an engine had been erected at Kistie's shaft, as is now erected there, the doing away with the flat-rods would enable Hocking's shaft to be sunk considerably deeper than it now is.—HENRY VINER.

Received.—"An Old Shareholder" (Quebrada).—"Verbum Sap" (West Rose-warne).—"N. Ennor."—"M. F."—"G. J. Gunther."—"Mine Agent" (Manchester).

SHARE DEALING.—We never interfere in the sale or purchase of shares; neither do we recommend any particular mine for investment or speculation, or broker through whom business should be transacted. The addresses of most of the latter appear in our advertising columns.

THE MINING JOURNAL,

Railway and Commercial Gazette.

LONDON, NOVEMBER 23, 1867.

THE FERNDALE COLLIERY EXPLOSION.

The frequent recurrence of extensive colliery explosions offers a temptation which is seldom resisted by the philanthropic unconnected with the working of coal, and hence there has been almost an inundation of suggestions and contrivances, which although, no doubt, brought forward with the best intentions by those with whom they originated, are completely worthless, owing to their inutility, or the impossibility of carrying them out; but it is seldom that practical men, whose opinions have the advantage of being based upon an intimate acquaintance with all the intricacies and difficulties of the subject, favour us with their views. The Ferndale Colliery explosion affords an important exception to the rule, as it has called forth a most valuable communication, which will be found amongst the Original Correspondence, from one of the largest colliery owners in the kingdom.—Mr. JOHN NIXON, the head of the well-known firm of NIXON, TAYLOR, and CORY, whose "Navigation Steam-Coal" is known wherever steam-shipping is carried on. As Mr. NIXON was born and educated as a viewer in the Newcastle-on-Tyne district, and as he has also had the advantage of 20 years' practical experience in South Wales, it would scarcely be possible to find one whose opinion is entitled to greater respect.

The task which Mr. NIXON has undertaken is a difficult one. He proposes to render compulsory the change in the system of working throughout the collieries of Great Britain, with the exception of Durham and Northumberland, by advocating legislation to enforce the adoption of the double shift system in every colliery liable to give off explosive gases. Great as is the change proposed, there can be no doubt that now Mr. NIXON has brought the matter prominently forward, the desirability of the change will be so apparent that legislation upon the subject will quickly follow. The double shift system is, as he very truly says, equally advantageous to master and man—the former gets his pit better and more safely worked, and the latter, with ordinary exertion, is enabled to earn as much in seven hours with the double shift as in eleven or twelve hours with the single shift. Numerous as are the advantages which Mr. NIXON has pointed out in his letter, there is one which, although inferred, is not specially referred to, yet it is probably greater than any which he has named—no working place is left continuously in the care of one set of workmen. With the single shift system the men are too apt to devote all their attention to sending up a quantity of coal, even to the neglect of the necessary consideration of the state of their working place; but if two sets are working alternately, each will take care that the previous one has left everything in proper condition. Until now the double shift system, although its universal introduction has been frequently suggested, has never, beyond the counties of Durham and Northumberland, received the attention it deserved; but it may now reasonably be hoped that, by rendering its adoption compulsory, the advantages derivable from the system will be extended to every colliery in the kingdom.

THE COLLIERY EXPLOSIONS.

LORD KINNAIRD'S APPLICATION TO THE HOME SECRETARY.

Well-directed and persistent efforts have, from the time of the accident, been pushed forward at the Ferndale Colliery to recover the corpses, and to make the roads passable. For the first week the energies of everyone were bent towards the disinterment of the deceased, and we have it upon the authority of a gentleman of all others best able to speak upon the matter that "nobly and courageously all hands conducted themselves. But heavy falls came, and fire-damp had to be fought with. All, however, are doing their best—owners, neighbouring viewers, the brave men themselves, and the Inspectors. They are putting in action their best energies both of body and mind, until finally the last relic of inanimate humanity shall have been brought to the surface. Up to this moment everything is satisfactorily progressing to such an issue." Up to the time of our writing 122 bodies had been recovered. These, added to the two men who have died of their injuries, make a total of 124 who have been interred by their relatives. It is computed that about 60 bodies yet remain under falls and in the workings not yet repaired, but it is believed that all these will have been got out by the time the inquest is resumed.

When that investigation has been completed it will, no doubt, have transpired to what the calamity is traceable. Mr. WALES, not only himself an able man, but he has the benefit of the assistance of Mr. BROUGH, whose experience of the mining world has extended to more than one continent, and whose last report to the Home Secretary, from which we quoted in last week's Journal, would seem to point him out as especially qualified to take part in investigating this particular accident. And here we cannot refrain, in passing, from congratulating everyone interested in mining science that that gentleman escaped, on the first day of his descent into the pit, an accident by which his life, too, was threatened. To what the catastrophe may ultimately be shown to be traceable we do not venture conjecture here; and, therefore, leave the subject, confident that the enquiry which is about to take place will fully elucidate it. There is, however, a matter arising out of this, and the other accidents which have recently occurred, of which some notice ought to have taken here. Lord KINNAIRD, a nobleman who is well known for his philanthropic sentiments, and for his sympathy with the colliers in their hard work, has just communicated with the Home Secretary, urging

that a Royal Commission should be appointed to investigate and report upon accidents in coal mines. His lordship does not, however, content himself by making this suggestion. He supports it by a positive expression of his conviction that if proper precautions were adopted the great sacrifice of life which is now taking place might be avoided. The report of such a commission laid before the next Parliament would, he believes, result in "some legislative measure being carried, rendering the adoption of precautionary and other measures imperative, without which there will be a continuance of fearful accidents, followed by the usual farce of a coroner's inquest, with Inspectors, colliery viewers, and witnesses who are compelled to withhold the truth or else take themselves off to another mine; all these proving before a jury, selected from tradesmen and others dependent on colliery and mining people, that there was no blame, winding up with the usual verdict, 'Accidental Death.' To use the words of these poor miners, 'If people as knows dare to speak, these things would soon be stopped.'"

Men who know more about collieries and colliers than Lord KINNAIRD at once perceive that his Lordship, in his laudable desire to benefit the collier, has altogether left out of calculation the part which the collier himself too often takes in bringing about the catastrophes which colliery owners and viewers have much more cause to regret than Lord KINNAIRD can possibly have. Mr. HIGSON, the Inspector for the West Lancashire and North Wales district, himself reminds us that the special rules which provide for the guidance of the workpeople are clear and comprehensive, but are not sufficiently obeyed, even by the best and most experienced workmen. It should, however, be distinctly remembered, he adds, that "omitting to obey one of these rules is like trusting one's life on a chain in which there is a defective link." The grievous loss of life which has taken place in collieries where every necessary provision for safety had been previously made known is most remarkable. A perusal of the last reports of the Mines Inspectors will demonstrate this to everyone who, not brought into daily contact with the miner in the pit, needs information upon the point. That loss of life, Mr. HIGSON says, "is evidence of the reckless and inattentive acts of the deceased, and shows most clearly that unless workpeople can be impressed with the belief that they possess the means of avoiding danger, and that they must use it upon all occasions, such serious casualties will continue to happen." Further on, the same Inspector has it that, even after accidents of the most painful character have been brought under his observation, the collier still "relies for all necessary protection on those who are in charge of the works. On finding anything wrong in his place of work he may, perhaps, mention it to the underlooker or fireman, when he meets with him, but he seldom makes such communications to the owner, or principal agent, and never to the Inspector of Mines." Similar testimony might be quoted in abundance, and all would show that the fatalities which everyone deprecates are not to be prevented by one-sided legislation, even by a "reformed" Parliament.

Colliery owners can have no objection to a Royal Commission, so far as such an enquiry might result in the disclosing of facts showing a want of precaution or care on their part. They and their viewers, and mining engineers generally, would be only too thankful if a Royal Commission could assist them in the efforts which they are constantly making with a view to bring these accidents to the minimum. Seeing, however, that the Select Committee on Mines have only just concluded their labours, it may be a matter for consideration whether the further cost of a Commission is now called for. Further legislation there will be, and the report of the Select Committee, and the recommendations of the Mines Inspectors, by which the report was accompanied, point to the direction which that legislation will take—probably more inspection, and an increase of the restrictions already placed upon colliery proprietors in the development of their property. With the probability of this, it might have been thought Lord KINNAIRD would be satisfied, and here for the present we leave his lordship's application.

On behalf of the 63 widows and the 120 orphans that have been made by that which we cannot but regard as a national calamity, we express an earnest hope that the suggestion of a writer in the *Daily News* of Wednesday, that the Lord Mayor of London would open a subscription at the Mansion House, may be acted upon. The result of such a movement, combined with that which is taking place in the Principality itself, where a large meeting to raise funds was held on Thursday, would, no doubt, lead to money being contributed sufficient to prevent the relatives of the deceased from having to resort to parochial relief. The contributions from the public generally should be more readily given when it is known that Messrs. DAVIS, the proprietors of the Ferndale Pit, have borne the mural costs, and are paying all the widows 7s. a week each until a more complete means of relief can be afforded.

IRON IN AMERICA AND ENGLAND.

Prominent public attention has been directed in the past few days to the iron trade in Great Britain and America respectively. A gentleman writing to the *Times*, under the signature of "J. S.," supposes, in introducing his letter, that "a few remarks upon the iron trade, which is at present so depressed, may not be unwelcome from one who has just returned from a hasty trip through some of the most important rolling mills in the United States and Canada. 'J. S.,' however, is not, it is clear, connected practically with the iron trade. He may have plenty of experience upon the selling of iron, but he does not know a great deal of its manufacture in this country. He would, too, seem to have imbibed a higher estimate of the ability and progress which the Americans have made in the rolling and manipulation of iron than that nation deserves. 'J. S.' shows correctly that altogether the American ironmaster possesses an advantage over the ironmaster in this country of a tariff and other charges, amounting altogether to perhaps 77 per cent.; but that even this is insufficient to enable the American mills to be carried on with success, and that, therefore, further applications are being made to the Government of the country with a view to additional import duties being imposed. He also lays down as absurd the prevailing notion in America that American rails are superior to English improved rails, and states that three-fourths of American rails are re-rolled old rails, with a thin top of puddled bars, these old rails having originally been shipped from England. As large a quantity as 25,000 tons of old rails, he says, have been sent to America from England during the past 12 months, there to be re-rolled, to produce the quality said to be so much superior to English.

The views "J. S." has arrived at upon this subject happen to be correct, but that correctness does not result from his correct appreciation of the true state of things. He would seem to imply that if a bar of iron were bad in England it could not be made good by being re-worked in America. This does not, however, follow. To make new a rail, the old rail must go through two further processes. In its progress it would be greatly improved for many uses, but not for those to which a rail would be put. A good rail cannot be made out of old iron, for it would be found, in the language of the trade, to be "too dry." The best rail is made from purely maiden iron, by which an amount of homogeneity is secured impossible by the use of old iron. These rails, therefore, which the Americans are now making out of our old rails will, no doubt, soon show lamination to an extent that will necessitate its abandonment after only comparatively little wear. "J. S." points out as worthy of the imitation of the British ironmasters the extent to which labour-saving machinery is employed in the American mills, and directs prominent attention to "a machine called a squeezer," which he says is in every ironworks in America, requires no manual labour, and "does the work of our steam-hammer, which requires the attention of two men." He then adds that there is only one of these machines used in England, and that a steam-hammer is not seen in one work out of ten in America. So much the worse, we say, for the one works in England, and so much the better for the one works out of ten in America. This squeezer, which "J. S." lauds, all ironmasters in England, excepting a very few who are making iron now and then in which good quality is not a desideratum, have long ago abandoned, and have resorted to the far more effective tool—the hammer. It is impossible with the squeezer to produce iron free from dross. So long, then, as the American master employs the squeezer to so large an extent as "J. S." intimates, it will be impossible for him, even with his

high tariff, to compete with the product of the British maker, for the quality cannot be made to equal the iron of this country, the quality of the original pig being equal.

ECONOMY IN GENERATING STEAM.

Amongst the more important improvements in the shape of steam-boilers in operation at the Paris Exhibition was the patent safety-boiler and superheater of Messrs. J. and F. HOWARD, of Bedford, and as favourable mention has already been made in the Journal, a large number of its readers will doubtless be glad to learn that at the Patent Forge Compressing Mills of Mr. E. J. Davis, Globe Wharf, Mile End, who is now busily engaged packing fodder for the Abyssinian expedition, an opportunity can now be obtained for judging how large an amount of care is being taken that all connected with the undertaking shall be well provided for, and, at the same time, inspecting a 40-horse Howard boiler in regular operation. The boiler consists of a series of horizontal and vertical tubes, united by simple yet most perfect joints arranged above the fire space, in such a way that the heat after twice passing over the water-space of the boiler is still further utilised in partially drying and superheating the steam, a thorough circulation being secured in every part of the boiler by the use of internal tubes of suitable length and diameter. The boiler combines simplicity and compactness, with efficiency to the greatest possible extent, and contains, so far as can be seen by a minute examination of every detail, no part which is at all likely to prove a source of inconvenience to those using it.

In the boiler in use at the Globe Wharf the tubes, which are of wrought-iron, are 60 in number, and are arranged in 12 rows of 5 each. The bursting pressure of each tube is upwards of 2000 lbs. per square inch, so that allowing the steam to be used at a pressure of 100 lbs. on the square inch, there would still remain 1900 lbs. margin, or one-twentieth, the usual margin allowed in Cornish boilers being only one-sixth, and even this, owing to flaws in the plates and other defects, is often much reduced; but, apart from the circumstance of possessing the power to resist a higher bursting pressure, the Howard boiler has likewise the advantage that, being composed of a number of small tubes, the bursting of any one of which would relieve the whole boiler, no serious danger would result from the failure of any flaw in the tube which might accidentally escape detection—indeed, it seems that a faulty tube purposely put into a boiler tested at Bedford burst with no other bad result than the extinguishing of the fire. The space occupied by this boiler is 14 ft. by 7 ft. 6 in., and 8 ft. 6 in. high, the weight of the whole being as near as may be 7 tons, and every part of it was lifted into place by two men, with the assistance of a Weston's differential pulley-block; yet in this instance the tubes were supplied in sets, and not in separate pieces, as they readily could be if it were desired to offer the utmost facilities for transit—as it was, the heaviest weight to be lifted was 9 cwt. The small amount of trouble which attends the use of the boiler can be judged of from the fact that ordinary workmen can put it together, and repair it, when necessary, with the greatest ease.

With regard to the economy of fuel, the Howard boiler has likewise much to recommend it, for it is found that in getting up steam to the working pressure only about one-fifth of the coal is required that is consumed by the ordinary Cornish boiler; for instance, in a 40-horse boiler steam can be raised to 80 lbs. pressure in 20 minutes with 2 cwt. of coal, the actual consumption being only 84 lbs. The heat is readily absorbed by the tubes, and the highest amount of evaporation is obtained. A Gauntlett's pyrometer, placed in the flue leading to the chimney, indicates 200° lower temperature than with the Cornish boiler. The current of heated gases impinges on the surface of the vertical tubes at right angles, instead of simply gliding underneath, as in the ordinary Cornish and tubular boilers. The relative value of the two kinds of heating surface is not inaccurately described by the observation that "the effect produced by the direction in which the heated current strikes the surface may aptly be compared to the rolling of a cannon ball rapidly along a sheet of ice, as compared with letting it fall vertically on its surface." And as to the simplicity and durability of the parts, it is sufficient to state that each of the tubes composing the boiler is secured in position by two bolts only, which are fitted with brass nuts to prevent locking with rust. The top of each tube is solid, and any tube can be taken out, whatever may be its position, examined, and replaced by the attendant in a quarter of an hour. The tubes, being counterparts of each other, are interchangeable, so that any of them may be turned about, or be brought in succession to that part of the boiler where the action of the fire is the most intense, thus greatly prolonging their durability. Every part of the boiler is readily accessible; it has no joint or bolt exposed to the action of the fire, and neither rivets nor seams are used in its construction. The tubes are so arranged and fitted that each is free to expand and contract; the variable expansion and contraction, therefore, to which they are subjected in the heating chamber produce no injurious effect.

The value of such a boiler as this in connection with mining, and especially with foreign mining, operations will be apparent. The whole can be readily transported to the most suitable position on the mine, however inconvenient it might be to carry there machinery of the ordinary description. There is no part of the boiler which could not be carried upon the back of a mule with the greatest facility over the most difficult mountain passes, and upon reaching its destination two or three ordinary European workmen could quickly erect it and get it to work; whilst from the very character of the boiler it is well adapted for the burning of any description of fuel that may be at hand. Owing to the perfect circulation produced by the internal tubes, incrustation is almost an impossibility, even where very foul water is used; and the fact that in the 40-horse boiler above alluded to there is not the slightest leakage at the joints is a sufficient guarantee that in this respect no inconvenience would be felt. The setting of the boiler is extremely plain, and by no means costly; and, although the most convenient shape is a parallelogram, it can be readily adapted to other shapes, where, owing to exceptional circumstances, it is more desirable. But, perhaps, the most important point in connection with the boiler is the nature of the steam, which will be just sufficiently superheated to secure a certain amount of dryness, but not so much as to prevent lubrication; it will give, in fact, a superheated steam of high temperature, but as this is always in contact with the saturated steam immediately above the water, it would never be of that excessive dryness which is calculated to damage the engine in which it is used. The boiler is altogether one of the most simple and efficient which has yet been introduced, and one which only requires to be well known to become a general favourite.

COAL IN THE INDIAN ARCHIPELAGO.—It is not generally known that the British colony of Labuan was established in December, 1846, in order to become a coal depot for steam navigation, a harbour of refuge for ships disabled in the China seas, and as being in a commanding position in the event of a naval war. The island lies on the north-east coast of Borneo, 700 miles from Singapore, and 1000 from Hongkong, and is the only other British port of refuge within the wide limits of the China seas. Its name, derived from the Malay "Laboon," or Anchor, describes how well it is adapted to be a place of resort for shipping, either to or from China; and as, in place of its being merely a coal depot, it has proved to be one great coal field, the island may be deemed an important addition to the British Empire. The Colonial Government, however, has taken no other steps to develop the valuable resources of the island than that of granting leases to companies, which have thereby successfully been encouraged to expend upwards of 300,000*l.* in securing to the country, with the hope of a fair profit to themselves, the advantage, inestimable in these days of steam-propelled shipping, of an inexhaustible supply of first-rate steam coal at the spot where it was most needed. After struggling with many difficulties, the China Steam and Labuan Coal Company has now completed works which admit of a daily supply of from 200 to 300 tons of valuable steam coal. The company, in order to legalise a proposed reduction of capital from 20*l.* to 15*l.* per share, now no longer possible, was placed last year in "liquidation," and in consequence of some small shareholders objecting to pay calls, "under supervision of the Court." The company has, consequently, been obliged to ask the Court's permission to send out its own funds to continue operations. This consent on the part of the

Court has been refused, and the question remains whether the entire property of the company is, therefore, to be sacrificed. Should this country again be involved in war with a naval power the value of the Labuan coal fields as now developed cannot be over-estimated, coal being contraband of war, and its supply for naval purposes from this country liable to dangerous interruptions. During peace a sum equivalent to the entire cost of the Labuan Government establishment would be saved, if 5000 tons a year only were taken of Labuan coal by the Navy at the island at 20*s.* per ton, the stipulated rate.

THE NOVA SCOTIAN COAL TRADE.—The recent legislation in the United States affecting the coal trade has given rise to much excitement in Nova Scotia. The Coal Owners' Association held a meeting on Oct. 27 (Mr. J. A. Moreau in the chair), and after some discussion unanimously adopted a memorial to the Senate and House of Commons. It was also decided to bring the subject before the Provincial Legislature at their next session. The Province being the owner of the mines and minerals within her limits, is jointly interested with the lessees in the development of the coal trade, while the numerous interests indirectly affected by it render it a subject of paramount importance to the Local Legislature, and that they can create within the dominion a coal trade that will be an equivalent for that with the United States was clearly shown, and it was hoped that this fact, when it is more generally known, will lead to a renewal of those commercial relations with the United States which have proved so mutually advantageous. The memorialists submit that the dominion of Canada, by adopting a similar policy to that of their neighbours, would in time render their coal trade independent of foreign legislation. The consumption of coal among them is rapidly increasing, and in a few years not less than a million of inhabitants of British America will use coal instead of wood for domestic fuel. When it is remembered that the consumption for household purposes in Great Britain is at the rate of a ton per head, and that their longer winters render at least twice as much fuel necessary, they look forward to a time when two millions of tons of coal will be required in the dominion alone for domestic purposes, independently of what will be required for manufacture, and other industrial purposes. The memorialists believe that the creation of a coal traffic between the eastern and western portions of the dominion would tend to bind them together by commercial intercourse, and to build a home trade by supplying the grain growers of the West with a remunerative return freight from the Atlantic seaboard, and that the adoption of a similar policy to that of the United States will be the surest mode of securing ultimately a return to a more rational commercial system on the part of their neighbours. Those districts which now supply Ontario and Quebec with coal would be enlisted on the side of the Eastern States in their endeavour to re-open those channels of trade which unwise legislation is rapidly closing up.

RESPONSIBILITY OF MINE AGENTS.—In reply to the memorial respecting the recent mining decision in "REGINA v. COPE" (Pensnett), which has been forwarded to the Home Secretary by the members of the Incorporated Association of Mine Agents, and by the committee of the Ironmasters' Association of South Staffordshire, for a remission of the fine, Mr. HARDY says that "having enquired into the circumstances of the case, he must decline to interfere in the matter;" so that this decision makes the consulting mine agent of a colliery responsible for every infringement of the general rules, although a resident mine agent be appointed, whose duty it is to daily visit and inspect the mine. Considering the very serious responsibilities thrown upon the agents and owners of mines by recent Acts of Parliament, they think that some notice should be taken of this decision in the next session, in order to get the duties of all officers of mines so defined and limited that all parties may know where their responsibilities begin and end.

THE NEW GOVERNMENT INSPECTOR.—We are glad to be enabled to say that Mr. FRANK WARDLE has been appointed Government Inspector of Mines for Northumberland, Cumberland, and Durham north of the Wear district, after passing a very satisfactory examination before the Civil Service Commissioners. The office was recently held by the late Mr. Albert Verner. It will be pleasing to the professional gentlemen of the North to know that a Tyneside man has received the appointment. Mr. Wardle is the son of the Rev. Henry Wardle, rector of Winton, and commenced his professional career under Mr. John Taylor Ramsay, Walbottle; and, subsequently, held appointments, which he fulfilled in a very creditable manner.

STEAM COAL IN THE GWENDRAETH VALLEY.—Attention is now being called to the resources of this valley at the extreme western point of the South Wales Coal Field, and there is no doubt they are much more valuable than is generally thought. Every seam has been represented as anthracite of the best quality, but anthracite exclusively. We have in these columns frequently disputed this statement, being convinced from personal investigation that some of the seams are equal in quality to the Aberdare steam coal. The subject has been noticed recently in some of our contemporaries, and Mr. Fairley, of Loughor, writes—"I find there is a belief that there is no such thing as steam coal in this valley. I must run counter to this opinion, the evidence, I think, being sufficient to warrant the contrary opinion. The following analyses of the Aberdare (No. 1) and Gwendraeth (No. 2) coals support my view:—

	No. 1.	No. 2.
Carbon	88.38	87.90
Volatiles matter	7.99	9.00
Sulphur	1.09	1.00
Ash	2.54	2.10

I have shown these analyses to an eminent factor at Swansea, who says No. 2 is a better steam coal than No. 1." This subject is of so much importance that we purpose discussing it at length next week.

GALE'S INEXPLOSIVE GUNPOWDER.—It is gratifying to learn that so far from the process of Dr. Gale having proved inefficient, it will, within a very short period, be in active operation. We are authorised to state that the inventor has been in communication with the authorities, and as the necessary arrangements are being made, the value of the invention will now be officially and thoroughly ascertained.

THE NEW TUNNELLING MACHINE.—A further trial was made at Hayle, on Wednesday, of Mr. BRUNTON's tunnelling machine, in the presence of a large assemblage of gentlemen eminently fitted, by their scientific and practical knowledge, to judge of the performance of such a machine. Among those present were—Messrs. Charles Fox, William Husband, W. M. Grylls, F. Harvey, R. H. Pike, T. P. Le Grice, C. Le Neve Foster, William Harvey, J. Ustick Scobell, S. J. T. Lynch, O. Glynn Bolitho, William West, J. D. Sherrieff, H. T. Ferguson, Joseph Mitchell, T. Corfield, Capt. Petherick, Barrett, Arthur, and Tremayne. The character of the rock was such as to constitute a severe test of the capabilities of the machine. Notwithstanding the hardness of the stone, a progress of 8 in. was made in 40 minutes. The level is of a circular form, 7 ft. in diameter. Some of the chips produced by the machine may be seen at the office of the MINING JOURNAL. We understand that several proposals were made on the spot to the inventor to drive levels in mines in the neighbourhood, and the unanimous opinion seemed to be that a machine was at length produced by which mechanical action, without the intervention of gunpowder, could be brought advantageously to bear on the exploration of mines and the formation of railway and other tunnels. To those who know the difficulty with which the best tempered steel chisels cut upon such a blue elvan as this machine had to deal with, it may seem almost impossible that pieces 2 or 3 in. square, and $\frac{1}{2}$ in. thick, should be split off in a continuous shower. Many doubts of the possibility were, we venture to say, brought to the place of trial, but we do not believe one of them was taken away. The explanation of the mystery makes it a mystery no longer, and the fact becomes the more readily accepted as true when it is seen to be in perfect accordance with recognised principles. The contest between the steel and the stone is one in which their comparative power to resist crushing is alone brought into question, and as a cubic inch of granite is crushed with a weight of 11,000 lbs., while 40,000 lbs. do not in the least affect a cubic inch of steel, it will be manifest that in such a conflict the steel ought to prevail; and it not only ought, but it does prevail, as all who witnessed the trial of Wednesday can testify. We are informed that Mr. BRUNTON has also many applications already, out of the country, to undertake tunnelling work with this machine, so it cannot be long before there will be details of actual working. We look forward with great confidence to the result, and trust that one benefit derived will be the extension of mining operations in Cornwall, to the advantage of "One and All."

COPPER ORE AND REGULUS.—The quantity of copper ore imported into the United Kingdom in the nine months of this year amounted to 54,548 tons, as compared with 68,673 tons in the corresponding period of 1866, and 55,767 tons in the corresponding period of 1865. The imports appear to have declined this year in almost every quarter; the falling off is, however, especially marked as regards Chilean,

of which only 8331 tons were received to Sept. 30 this year, as compared with 17,938 tons in the corresponding period of 1866, and 16,363 tons in the corresponding period of 1865. The quantity of copper regulus imported to Sept. 30 this year was 20,906 tons, as compared with 27,450 tons to the corresponding date of 1866, and 24,502 tons to the corresponding date of 1865. In these latter imports the receipts from Chili figured to the extent of 18,702 tons to Sept. 30 this year, as compared with 24,241 tons to the corresponding date of 1866, and 22,919 tons to the corresponding date of 1865. The total imports of copper ore and regulus in the ten years ending 1866 inclusive were as follows:—1857, 95,094 tons; 1858, 97,099 tons; 1859, 84,455 tons; 1860, 97,317 tons; 1861, 94,480 tons; 1862, 117,438 tons; 1863, 102,099 tons; 1864, 93,304 tons; 1865, 122,248; 1866, 129,547 tons.

REPORT FROM SCOTLAND.

Nov. 20.—If let alone, the price of Pig-Iron in this market would become nearly stationary, with a downward tendency, in the present state of the trade, and it is to speculation alone the sudden jerks up and down are to be attributed. Speculation having completely failed to keep prices up, the "bulls" appear afraid to hold larger, and prices had declined on Monday from 9*d.* to 1*s.* a ton from the highest of the previous week; but they again rallied yesterday, and it is supposed they were let down with the intention of again attempting to raise them at a bound. Their little game just now has been a losing one, and it is difficult to see how they can so move their men as to have them "crowned" in the present aspect of trading and political events. The home trade is still restricted, and although the exports to date show an increase of 36,500 tons on the year, that increase is decreasing almost weekly, and may yet leave a deficit before the remaining weeks of the year are run. For this week the shipments show a small increase, being 11,905 tons, against 11,380 tons in the corresponding week last year, but this small increase comes after a series of weeks of decrease. The market to-day is quiet and steady, and a few sales reported at 53*s.* 6*d.* cash, and 53*s.* 8*d.* a month, with buyers at these prices at the close, sellers 1*d.* per ton higher. Makers' in limited request; Gartsherrie and Coltness, 61*s.*; Calder, 59*s.* 6*d.*; No. 1, g.m.b., 54*s.* 9*d.*; No. 3, 53*s.* 6*d.* The demand for second-class brands of Finished Iron is rather improving than diminishing, and orders have in some instances been booked for January, next year. First-class brands are also in rather better request, with a tendency to improvement in prices. In shipbuilding iron there is an appreciable addition to the demand, but there is a likelihood that rates will not be long continued as at present quoted. New contracts are being entered into weekly, but the price per ton at which they have been taken precludes the possibility of more enhanced rates being paid for the iron, so that our ironmakers here will have to follow their confreres in England, and submit to a reduction in wages, or leave working—a consummation most devoutly to be avoided. Last week our Chamber of Commerce took up the Russian duties on bar-iron, and showed that the duty imposed excluded a trade with that country, the common quality of Scotch bar-iron, by the duty, being raised to a higher price in Russia than first-class Russian iron could be sold for here. The report was transmitted to Lord Stanley, in order that he might represent to Russia that if commercial relations with Great Britain were to be encouraged, it was indispensable that rates of duty very considerably less than those proposed should be adopted.

The very favourable price of coals for shipment is showing itself in our export trade, which has this week reached 30,590 tons, against only 19,755 tons in the same week of last year. Of the larger sum there are about a-third for the East, so that Government should have their Abyssinian fleet cheaply fueled. The market still continues weak, and there is not much of a home trade doing. The colliers are disappointed at not having received a rise in wages, as was in a sense agreed upon by the masters some time ago. The masters are beginning to perceive that they promised too much, and as they cannot raise the price of their produce, are demurring to give the increase of wages. It would appear that the miners in the Glasgow district are slow in responding to the call of the other districts to agitate for an advance; and being all located in or near the town are aware of the depression in the various trades, and are unwilling, by precipitation, to originate a strike, and swell the number of the unemployed. Allanton Colliery, Larkhall, has become flooded, from some undiscovered cause, but no casualties have occurred.

Among the Railway Parliamentary notices, just published, is one for the repeal of the North British and Edinburgh and Glasgow Railway Companies' Amalgamation Act of 1865. The powers sought to aim at placing the Edinburgh and Glasgow Railway in the same position as regards plant, capital, debentures, powers, &c., as it occupied previous to the amalgamation. The name of Mr. W. M. Wilkinson, solicitor, who occupied a conspicuous position in the opposition to the North British Railway Money Bill, is attached to the notice, and it is presumed that action is being taken on the part of some of the Edinburgh and Glasgow Railway shareholders.

Of the launches this week is a screw steamer of 1700 tons for the Austrian Lloyd's Steam Navigation Company. The vessel is named the Ceres, and is of 250 horse-power.

REPORT FROM NORTHUMBERLAND AND DURHAM.

Nov. 19.—The Coal and other trades continue, on the whole, good, and there is little change connected with them. The reduction of the water at the Shank House Pit, Cramlington Colliery, is now going on satisfactorily, the rate of reduction being 1 ft. vertically per day. As the present height of the water from the bottom of the shaft, upwards, is about 50 ft., the water may be expected to be got out shortly, and the workings re-entered.

As stated in last week's Journal, Mr. John Straker has been appointed to the vacant Chairmanship of the Coal Trade Association of Northumberland and Durham, and a more useful and fitting man could not have been chosen for the important office.

"Elfin," in the *Newcastle Daily Chronicle*, generally so well informed, has, in his last, fallen into serious errors. He has, no doubt, been hoaxed by some wag, or misled by some ignorant babbling. He says that "the lives of the miners are constantly hanging, as it were, by a thread." In old pits the "goaf," or wrought out part of the mines, is constantly charged with impure gas, ready to burst forth and carry death into the workings upon a very slight derangement of the ventilation; and as to deep pits, they are full of danger, &c. Of course, this is quite unanswerable, the most of it being quite erroneous. The assertion that, as a rule, mines are only profitable to masters and men when they can be worked with naked lights is quite incorrect. The bulk of the best mines in Durham are worked with safety-lamps, and, although they are well ventilated, it is quite necessary to use safety-lamps as a precaution. What an opinion he must have of the viewers and others who have charge of the mines, and whose lives are constantly endangered, as well as those of the men.

A meeting of ironmasters was held in Newcastle on Friday, when it was determined to make another reduction in the rate of wages, and notices to that effect were posted up at most of the principal works on Saturday, and it is generally understood that the amount of reduction will average about 10 per cent., though there are some classes of labour that will not be reduced so much. The men at the Darlington Iron Company have agreed to terms which give hammermen 10*s.* per shift; assistants, 6*s.*; forge rollers, 7*s.* 6*d.*, and assistants 5*s.* each per shift. Puddling is to be 8*s.* and 7*s.* per ton, according to mixtures. It appears that the demand for manufactured iron, and the price received for it, is so very unsatisfactory, that this unpleasant course has been determined upon. Although the demand for pig-iron continues tolerably good, the price remains as last quoted.

Several letters have appeared in the local papers respecting the late boiler explosion at Waldrige Fell Colliery, one of the most remarkable being signed "A Colliery Brakesman." The writer alludes to the fact, which is very remarkable, that boiler explosions occur so frequently on being set to work after cleaning, repairing, &c., and he assumes that the cause of this is the formation of some kind of gas, and recommends that the valves should be lifted, and the full pressure only put on by degrees. Now, this plan is highly recommended, and regularly acted upon, by many colliery engineers, but still it is quite possible that, although the fact is acknowledged, that a great number of explosions of boilers occur under those particular circumstances, the reason for this may not have been defined. Some believe that the joining of the new plates to old ones causes a rupture by unequal expansion of the boiler being heated; others think with the "Colliery Brakesman," that a peculiar gas is formed on the ad-

mission of fresh water, and the said water heated. But does it not follow that those peculiar circumstances alluded to are the most dangerous that can occur in the life of a boiler? As every part of the boiler has been thoroughly cooled for cleaning, &c., if the fire is applied, and pushed rapidly forward, danger may arise from unequal expansion; and prudence appears to dictate that the boiler ought to be gradually heated up to the required point, and the valves lifted to allow the escape of compressed air, &c.

Mr. Frank Wardle has been appointed, as successor to the late Mr. Albert Verner, the Government Inspector for this district.

PRESENTATION TO A COLLIERY VIEWER.—On Saturday, a deputation of the workmen of Peases' West Collieries, visited Thornley Colliery for the purpose of presenting a testimonial to their late viewer, Mr. J. G. Crofton, on his leaving the Peases' West Collieries to take charge of the Thornley and Ludworth Collieries, belonging to the London Steam Colliery and Coal Company (Limited). The testimonial consisted of a very handsome silver tea service, and bears the following inscription:—"Presented to Mr. J. G. Crofton, on his leaving the Peases' West Collieries, by the workmen and a few friends, as a sincere token of respect and esteem, October, 1867." Mr. T. Mitchell, of Peases' West Colliery, made the presentation in a neat speech, referring to the long time that he and Mr. Crofton had worked harmoniously together, and the regret that was felt on his leaving the neighbourhood. Mr. Crofton feelingly acknowledged the testimonial.

NEW COLLIERY NEAR COLLIERY DYKES, DIPTON.—A commencement to sink a new colliery took place on Monday at the above place, by the interesting ceremony of cutting the sod, which was accomplished by Miss Dickenson, of Shotton Bridge, who named the colliery after herself—"Lily." The owners are Messrs. Robert Dickenson and Son.

REPORT FROM MONMOUTH AND SOUTH WALES.

Nov. 21.—No improvement has taken place in the prospects of the Iron Trade of this district, and the orders on hand are being speedily worked out. The reports from the various works continue to be of an unsatisfactory character, and not the slightest degree of animation is being evinced in a single branch of the trade; in fact, in some instances business is now worse than it was at the commencement of the present quarter. The orders received are said to be inadequate to those being worked out, and the number of work-people employed two-thirds time are consequently increasing. There is considerable apprehension that the worst time has not yet been witnessed, and that before next spring some few privations will have to be endured by the working classes of this district. At some of the leading establishments operations have undoubtedly been checked by the closing of the Russian shipping season, for during the period shipments were made to that country makers had some degree of confidence in keeping their mills and forges going. In previous reports reference has been made to the large quantities of iron sent to the Muscovite empire, and it is not unreasonable to assume that a fair share of future orders will be sent to this district; but at the same time it must be borne in mind that several heavy Russian contracts have of late been given to Belgian makers, who most undoubtedly received them through giving in a lower price than that sent by South Wales makers. It has been said by a gentleman, well versed in the home and foreign iron trade, that continental makers pay from 10 to 20 per cent. less wages than the makers of this district, and so long as this is the case it is not improbable that it will materially affect the number of contracts sent to this district. It is certainly far from satisfactory to find that while our makers are compelled to put their hands on short time the Belgian makers can keep their hands fully employed. The Honduras Government are inviting offers for a loan of a million to make a railway from the Gulf of Mexico to the Pacific, with interest at 10 per cent. per annum, the loan to be repaid by small instalments in seventeen years, with a share in the profits of the line for fifteen years. Should the loan of the sum required be obtained, a quantity of railway materials will be required, and it is not improbable that some of it would be obtained from this district. On home account contracts are slow in coming to hand, and this will probably be the case until there is a change in the money market. Public confidence in railway securities appears to be entirely lost, and until that is restored there is little likelihood of a good trade being done on home account. For the commoner qualities of pig-iron there is but little enquiry, but the best brands are selling tolerably well. For Tin-Plates orders have somewhat slackened, but prices remain firm. For Steam Coal there is a good demand, and the exports during the past month were more than 30,000 tons in excess of the corresponding period of 1866. The increase was chiefly on account of the quantity required for the Abyssinian expedition. The demand from the Mediterranean and French ports has considerably increased of late, and there is a probability of a brisk demand for some little time to come. For House Coals there is a tolerably fair demand, but there is room for a considerable improvement in this branch of the trade, and as the weather has given indications of late of increasing in coldness, there is a probability of an increase in the consumption.

Mr. H. Huxham was summoned before the Neath magistrates for the non-payment of 2l. 10s. 9d., wages due to Patrick Leary. Mr. Payne, who appeared for the defendant, said he had two objections to raise in this case—first, that the Act of Parliament required that application should be made within six calendar months from the time such money became due, which had not been done in this case, the summons showing that the money had become due on March 4 last; and, second, that Mr. Huxham, described in the summons as steward to Mr. Parker, was no longer such a steward, nor was he at the time the summons was taken out, the property (the colliery) at the time being clearly in the possession of the Baglan Hall Colliery Company (Limited). Complainant said he worked in the Baglan Hall Colliery 10 months, up to April 30, at 3s. per day. On June 19 his wife received for him 16s. on account of the wages due to him. He had not been paid anything since. He had never seen any bills posted up in the works containing such words as these:—"The Baglan Hall Colliery (Limited)." By Mr. Payne: He was told in May that the works belonged then to the Baglan Hall Colliery Company, but he was not working there then. Mr. Huxham had not engaged him. Mr. Payne contended that the responsibility of payment did not attach to Mr. Huxham, nor was Mr. Parker liable for it.—The Chairman: When did this company commence?—Mr. Payne: On May 14, I am informed.—The Chairman: We are surprised at the company and at Mr. Huxham not paying this money. We have not the slightest hesitation in making an order upon Mr. Huxham for the payment of the sum sought to be recovered, together with the costs. We are surprised that there should be any opposition made to the payment of these poor people, and that they should be obliged to incur an expense in order to prove their claims for work honestly done.—Mr. Payne: Will you grant me a case?—The Chairman: You can appeal.—Mr. Payne: There is no appeal.—The Chairman: Well, we do not think it necessary to grant a case in this instance.

The Glynogwyn Ironworks and Foundry, with freehold and copyhold mineral and house property, are announced for sale. The works are situated about four miles from Pontypool, and adjoin the Ebbw Vale Company's Works at Abersychan.

We learn from the Cwmaman Valley that the prospect of work for the winter is dreary. A reduction of 10 per cent. in the colliers' wages has been determined upon by all the owners in the Valley, with one exception. The Raven Inn Colliery has been at a stand for about a month, and the men have been compelled to migrate into Glamorganshire, there being no work here for them. We understand the demand for anthracite, the coal produced in this valley, is very limited.

The arrivals at Swansea include the Ann Jones from Rotterdam, with 89 tons of copper ore for Bath and Son; Parkside from Santander, with 179 tons of copper ore for Richardson and Co.; and 60 tons of iron ore for Richards, Power, and Co.; the barque Ticta from Iota, with 575 tons of unwrought copper, and 234 tons of wrought copper. In bars, for H. Bath and Son; Jeune Auguste from Cherbourg, with 95 tons of iron ore for Robert Crawshaw; Rose de Mai from St. Roder, with 167 tons of zinc ore for Richardson and Walters; Faithful from Bilbao, with 308 tons of iron ore for W. H. Tucker; Sylph from Bilbao, with 296 tons of iron ore, also for W. H. Tucker; James Cuckow from Bilbao, with 247 tons of iron ore, also for W. H. Tucker; Admiral Fitzroy from Carizal, with 350 tons of copper regulus for H. Bath and Son; and the Hermine from Aveiro, with 169 tons of copper for Richardson and Co.

THE TERRIBLE COLLIERY CATASTROPHE IN SOUTH WALES.—The recovery of the bodies in the Ferndale Pit, Rhondda Valley, has not proceeded so rapidly as we were led to believe at the time of writing the report which appeared in last week's Journal. At that time some 100 bodies had been recovered, and it was believed that 73 were then in the pit, and would be found before night. Up to the present time (Thursday evening) the number of bodies recovered amounted to 147, and the delay has been caused from the quantity of foul gas in the pit, and the fearful stench arising from the decomposition of the bodies. The numerous falls which took place also rendered it extremely dangerous for the exploring party to prosecute their search for the bodies alone, and, after a consultation among the mining engineers, it was determined to form four gangs, each under the direction of a mining engineer, and the four gentlemen in command are—Mr. Bedlington, R. Ryaney, Mr. Harrison, Dinas; Mr. Morgan Joseph, Rhondda; and Mr. Kirkhouse, Bwlfa. Each gang works for 12 hours, thus giving the others 36 hours' relief. It was also determined to put the pit in something like working order as the removing of the debris proceeded, so as to obtain a better ventilation, and secure safety to those engaged in the work. The main efforts of the explorers have been directed chiefly to Caswell's heading and the Contractor's level, both on the Rhondda side; and so energetically has the work been pushed on that up to Tuesday night 24 more bodies had been recovered, and within 40 hours after the total number recovered amounted to 147. The arrangements, as we have sketched them, will continue in force until the whole of the bodies are brought

to bank, which will probably be the case by the time this report meets the eyes of our readers. During the past week three horses were found alive in the pit; two were secured, and the other scamped away, and has not yet been captured. The other two, since being rescued, have fed remarkably well, and both were comparatively uninjured. The number of widows are said to be 63, and orphans under 12 years of age 120. The list having been ascertained to be complete, the Messrs. Davis, the proprietors of the pit, caused it to be made known that the amount they had at present decided upon paying was 7s. per week to the widows of the colliers killed in the pit, and to the children under 12 years of age 2s. per week. The men who were injured by the explosion receive 5s. per week from their own benefit fund, formed at the time the colliery was first worked. The club is managed by a committee of colliers, and presided over by Mr. David Davis. Meetings were to be held at Merthyr, Aberdare, and Pontypridd this (Thursday) evening, the object being to promote some method of obtaining relief for the bereaved sufferers through this calamity. Deputations have waited upon Messrs. Davis to consult their feelings, and have been informed that they (the Messrs. Davis) have done all they could for the permanent relief of the sufferers, and whatever public kindness might undertake for this purpose they would gladly unite in carrying it out. It has been thought it would be too hard for Messrs. Davis to bear all the burden, and that it was only right for the public to show its sympathy and help in the good work. At Aberdare a committee has been formed, and consists of the vicar, several dissenting ministers, and a number of respectable tradesmen, to carry out the object in view. A similar plan will probably be adopted in other towns where meetings have and are yet to be held. It is said that something like 8000l. will be required for the purpose of forming a permanent fund, similar to that formed at Risca, when 142 colliers and boys lost their lives in December, 1860. Efforts are being made to call a meeting in the City of London, having a like object in view as the meeting held at Aberdare and elsewhere, and we have no doubt that similar meetings will be held in all the large towns of the United Kingdom, and that the requisite sum will be obtained without difficulty.

"THE INDUSTRIAL RESOURCES OF SOUTH WALES."—A work of considerable importance is now in course of preparation on "The Industrial Resources of South Wales." The editor is Mr. HOWELL DAVIES, of Carmarthen, and memoirs on various industries have already been promised by Mr. Vivian, M.P. for Swansea; Major Grant Francis, Swansea; Mr. Chambers, Haver; Mr. Buckley, Llanelly; Mr. R. Kirke Penson, Ludlow; Mr. J. H. Rees, Chairman of the Llanelly Harbour Commissioners; Mr. Robertson, Hazel Hill, New Milford; Mr. Waters, mining engineer, Carmarthen; Mr. Tregenna, Pembroke Dock; Mr. Player, Melincroft; Mr. J. Lewis, Swansea; Mr. Owen, Glogue; Mr. Hicks, St. David's; and others. Those who are willing to assist in this work should communicate with the editor, who wishes to make the book as complete as possible.

FOREST OF DEAN.—The peaceful tone of Napoleon's speech at the opening of the French Chamber, on Monday, will have a beneficial effect upon the iron trade of the Forest of Dean district. The dark cloud which has lately hung over the dynasties of France and Prussia has been for a time removed by the closing words of the Emperor of the French, and thus it is hoped that, instead of looking forward to hostilities on the Continent, trade will increase at home and abroad. So long as any appearance of war existed in the quarter mentioned, depression would unquestionably show itself in manufacturing districts. The iron trade of the Forest cannot be spoken of as being so favourably placed, just now, for orders as a few months ago; neither are there hopes that an improved state of things, to any great extent, can be realised this year. The iron trade, too, is somewhat dull, the depression in South Wales being one of the causes. However, as yet there is no reason for despondency, there being little or no iron in stock at the Forest Works. The Coal Trade remains good, the outputs being more than in any previous year. The majority of the workmen employed at the extensive works at Lightmoor have been thrown out of employ by the breaking of the large winding-engine used at Lightmoor. On Friday morning a smash occurred in the engine-house, and the engineer was obliged to quit his post, and make his escape. It was found that some of the principal parts of the engine were broken, so much so that it was rendered unfit for work, and it will, it is said, require some hundreds of pounds to replace. In addition to this loss, which will fall upon the proprietor, Mr. Henry Crawshaw, the majority of the colliers—at least, upwards of 100—are thrown out of work, and will be so, it is feared, until the early part of next week. Mr. Crawshaw, with his accustomed consideration, has found employment for as many of the men as possible at other places. The tin trade is not very brisk.

REPORT FROM DERBYSHIRE AND YORKSHIRE.

Nov. 21.—The trade in Derbyshire, so far as iron is concerned, continues quiet, and no material improvement is anticipated during the remainder of the year. There is, however, a good business being done in Coal, both for household purposes and for gas. In the southern part of the district there are now upwards of 1000 men out, without any prospect of their resuming work, as the masters, although inconvenienced, adhere to the determination, made some months ago, not to employ any Union men. During the week there has been a great deal of excitement at Church Gresley and Swadincote, and meetings have been held for the purpose of enjoining the men to hold out. The Miners' Associations throughout the country have made a levy of 3d. per head on their members for the support of those out, and which will amount to about 5000l. a week. On Tuesday, at Swadincote, eight of the Unionists were sent to prison for various terms for assaulting the men at work at the Marquis of Hastings' Colliery, at Church Gresley. There is no alteration in the state of the Sheffield trades, most branches being remarkable for their quietness, and that at a time of year when it has been usual to work nearly all hours, so that the Christmas "bulling" promises to be very limited indeed. No material alteration is anticipated before the advent of the New Year, when, with Europe at peace, a change for the better will, in all probability, take place, when amongst other branches that of heavy plates will doubtless look up.

In the South Yorkshire district business generally is in a tolerably healthy state. At Milton and Elsecar the men are working full time, the rail mill in particular being kept actively going. Sheets and hoops are also in fair request, for which there has been a very good demand for a considerable time past for exportation to Russia and other parts of the North of Europe. In Coal there is a good business being done, Silktones and the first qualities of the Barnsley seam being in most request. During the last two or three days there has been a better enquiry for shipment from Grimsby, whilst a full average tonnage is being forwarded to Goole for home parts. Owing to the depression in several of the iron and manufacturing districts, there is not so much doing in engine fuel. Coke continues in fair demand, so that stocks are moved nearly as fast as turned out.

All attempts at opening out the workings of the unfortunate Oaks Colliery have been abandoned for the present, and the pit-bank is now as remarkable for a total absence of life as it was previously for its bustling activity. The No. 1 shaft continues at intervals to act as an upcast, sending up a great deal of gas at times. So far no one appears to be acquainted with the steps which are intended to be taken with a view to exploring the workings, with the object of recovering the bodies, or when operations will be resumed. At the new shaft being sunk at Ardsley, in connection with the colliery, an engine is being put down, for the purpose of pumping out the water, which for some time past has stopped the work of sinking. The fund in the hands of the Mansion House Committee, which exceeds 24,000l., and which was subscribed in aid of the sufferers by the Oaks and Talke Collieries, is still unappropriated. All the efforts of the Barnsley and Talke committees have been unable to obtain any part of the fund, and, as a result, the former have been obliged to give a much less weekly allowance to some of the widows than they would otherwise give. Seeing that in South Yorkshire there is now a permanent fund, at the head of which are Earl Fitzwilliam, Lord Wharmcliffe, Lord Halifax, and other noblemen and gentlemen, it is expected that the parties named will take the matter up, with a view to obtaining some declaration from the Mansion House people as to what they intend doing with the money.

THE YORKSHIRE COAL FIELDS.—MIDLAND RAILWAY EXTENSION.—That a great mistake was made in laying out the Midland Railway, in the first instance, is now acknowledged—at least so far as some portion of the northern part is concerned—and the rectification of the mistakes has devolved upon those who have had the management of the line during the last few years. Considering the eminence of the man who laid it out, one is lost in endeavouring to account for the reason why several important towns were passed by, which easily and advantageously might have been included in the system. This will be at once apparent on looking over the names of the stations on the main line. Thus, proceeding northwards, we find that after just skirting Chesterfield the railway passes on the Masborough, so that Sheffield was entirely omitted, although it was favoured afterwards with a branch five or six miles long, instead of being made one of the principal centres of the system, which its large population and mercantile and manufacturing importance ought to have ensured. After leaving Masborough, the route goes through a partly agricultural and partly mining district, whilst by inclining to the left nearly the whole of the South Yorkshire coal field might have been included. The town of Barnsley was also omitted, and the station erected at Cudworth, four miles from the former, and where there was little or no traffic. The same was the case with regard to Wakefield, the station being placed at Oakenshaw in the first instance, although since rectified. The effect has so far been to deprive the Midland of a great deal of passenger traffic, and a fair share of the carriage of the minerals from two districts turning out something like 2,000,000 tons of coal per annum. Those drawbacks to the development of what may be termed the

natural resources of the Midland are now fast disappearing, and in less than two years will have entirely passed away. In the first place, a direct line is being made from Chesterfield to Sheffield, opening out, most important works projected, on the route. At Sheffield there is to be a large forge and iron works. The ironstone and coal of the Unstone Valley is already in course of development, whilst at Dronfield and the neighbourhood there are to be ironworks erected, and extensive made of those already in existence. It is expected that this important line will be finished in about 18 months, and it promises to be fully as remunerative, if not more so, than any similar length in the system. Seeing Derbyshire produces fully two-fifths of the coal carried by railway into London, or fully 100,000 tons monthly, with the new pit opening out, from Cudworth to Barnsley will also tend to largely increase the production of coal in that locality, and already one of the largest collieries in Yorkshire is being sunk close to it. In addition to the districts already named, there are the vast ironstone fields near Kettering and Wellingborough, on the estates of Lady Hood and General Arbuthnot, which are about to be developed, and of which we shall have more to say hereafter. The above facts show the bright future that is in store for the Midland Railway, and the benefits it will confer on certain districts, which, teeming with wealth, have been unable to find an outlet for it.

LOCK-OUT OF MINERS.—A large meeting of miners was held at Church Gresley, Derbyshire, on Tuesday night, for the purpose of considering the position at the 1000 men who are just now locked-out in South Derbyshire. The meeting was held in the People's Hall, and was presided over by Mr. Alderman Wainwright, of Wakefield. Mr. G. Putter was present, and addressed the meeting at considerable length. On Friday, at the meeting of the Miners' National Conference, held at Durham, it was stated that between 4000 and 5000l. had been distributed amongst the men during the lock-out. It was unanimously resolved that a levy of threepence per week should be made upon all members of the Miners' National Association. It was estimated that the levy would yield the following amounts per fortnight from the various districts:—South Yorkshire, 6000 members, 1500l.; Wigan, 6000 members, 1500l.; West Yorkshire, 2200 members, 550l.; Farnworth, 3100 members, 775l. 10s.; Northumberland, 1500 members, 375l. 10s.; St. Helen's, 1200 members, 300l.; Haydock, 1000 members, 250l.; Worsley, 800 members, 200l.; Oldham, 500 members, 125l. 10s.; South Staffordshire, 400 members, 100l.; North Derbyshire, 400 members, 100l.; South Staffordshire, 300 members, 75l. 10s.—Total number of members, 23,400; and total sum per fortnight, 8850l. But even this sum would be too small, it being stated that 5000l. per week was needed to afford proper relief to the locked-out men.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

Nov. 21.—The Iron Trade, both in the north and south of this county, is decidedly slack, and complaints are now universal. Not only are orders scanty, but the low prices make it very questionable whether profit can be made, and there is a growing disposition to look with grave anxiety, if not with apprehension, to the coming winter. As yet pig-iron can hardly be said to be decidedly lower, but there is scarcely a sale taking place; and, unless an improvement is experienced, buyers will, probably, hold out for a reduction of price at the close of the next purchases. The intended reduction of wages in the ironworks in the North is naturally attracting attention, and a very general opinion is expressed that a similar step will be necessary in Staffordshire. The question is whether if wages were reduced capitalists would be induced to order iron to hold, or whether purchasers would anticipate their requirements. The subject will be anxiously debated during the next few weeks. The Hardware Trades are generally slack, and short time is prevalent. The Pottery Trade, too, is dull, and, except the Shoe Trade of Stafford and Stone, business must be regarded as decidedly slack in this and the adjacent counties.

The tardy appearance of the Reports of the Mines Inspectors again calls for protest against the wretched feebleness which seems to mark almost all the actions of our executive Government. The details of accidents which happened during 1866 have lost almost all interest by Nov., 1867. Why cannot the reports of the Mines Inspectors, like those of the Factory Inspectors, be printed half-yearly, and published, as they easily might be, a month after the date to which they come? The reports themselves also are, as a rule, too long, too full of detail, and want generalising and condensing. Some remarks by Mr. Wynne, Inspector for North Staffordshire, as to the necessity of securing a superior class of managers, suggests anew what we have urged in this letter—that managers of mines should organise themselves, and meet and discuss the causes of accidents, and the means of prevention, from time to time. They should make the avoidance of accidents, as far as possible, a point of professional honour, and instead of putting themselves in an attitude of hostility to Inspectors, and to those who deplore the waste of human life in mines, lead the way in suggesting, considering, and trying every means of reducing the awful death-rate of the miner's life. One miner in 216 was killed last year, to say nothing of those injured. It is reasonable to suppose that the average working life of a miner is 20 years, which would give 20 deaths for every 216 employed, or, in round numbers, 1 in 10 prematurely sacrificed.

The accident at the Homer Hill Colliery, near Stourbridge, described last week, has already resulted in ten deaths, to which, at any rate, one addition is anticipated. During the week Mr. Baker, the district Inspector, has been down the pit four days, remaining one day for six hours. The fall of coal is said to have been of very great extent. The enquiry before the Coroner is adjourned to Dec. 5. In reference to the accidents in North Staffordshire, noticed last week, in the case of the Berry Hill Colliery, the jury recommended that proceedings should be taken against Mr. Bowers, the owner, on account of the laxity of discipline manifested. At the inquest, in reference to the explosion at the Boteslow Colliery, it was proved quite clearly that both firemen knew there was gas in the pit, and that they were told by the underground bailiff and the butty that lamps must be used, yet candles were given out. It was clear that the preliminary examination of the workings with a lamp was a mere form, for while it was going on the men were being supplied with candles. The two firemen were committed for manslaughter.

An important and influential conference was held on Monday, at Wolverhampton, to consider how the educational requirements of the Factory Acts can be carried out. The Earl of Lichfield (Lord Lieutenant of Staffordshire) presided, and Lord Lyttelton (Lord Lieutenant of Worcestershire, and President of the South Staffordshire Association for Promoting Adult Education, under whose auspices the meeting was called) was present. Mr. R. Baker, chief Inspector of Factories, gave explanations, showing every disposition to assist those who are disposed to carry out the requirements of the law to do so with the least possible difficulty. The want of more schools, and especially of more teachers, was strongly urged by statistics, Mr. J. C. Tildesley reading an elaborate paper on the existing wants of education, and the increased provision which the Factory Acts and the Hours of Labour Regulation Acts will require.

The Wolverhampton Trades' Council, an association of workmen, have requested the Wolverhampton Chamber of Commerce, as representing the employers, to appoint a committee of their body, who, with an equal number of members of the former body, should form "a deliberative council, for the purpose of uniting both branches of the productive industry of the borough." The Chamber of Commerce has made the appointment, and thus the workmen's and masters' representatives will meet on equal ground.

GOLD IN NOVA SCOTIA.—The Sherbrooke (N.S.) Mines yielded last month over 1200 ozs., the largest proportion being contributed by the Palmerston, Wellington, Derby and Hayden, and Dominion Companies. The mean for this district for the 12 months ending Sept. 30, 1867, was \$7'47 (or about 30s.) daily per head.

COMMERCIAL ENTERPRISE IN COSTA RICA.—The Executive of this thriving little Republic are leaving no stone unturned to secure to those who aid in the development of its almost boundless resources. The Inter-oceanic Railroad, the importance of the establishment of which was specially referred to the articles on the Mineral Resources of Costa Rica, published in the *Mining Journal* some few months since, has been already commenced, and a decree of the enlightened President, Señor Jose Maria Castro, of the most favourable character has since been promulgated, wherein it is provided that the Bay of Limon shall be opened to foreign and coasting trade as the principal port of the Republic of the Atlantic coast; that any vessel, bound from whatever port, may under a friendly or neutral flag import or export every class of merchandise, except those subject to prohibition or monopoly, and deposit and transport them freely, under such regulations as the Government may establish; that all vessels that anchor in the said Bay of Limon shall be free of all duties or imposts for tonnage, anchorage, or roll, as well as for documents or certificates which may be issued; that after the Costarican Railway Company have built their docks or warehouses, no Custom duties shall be recovered before merchandise and produce for consumption have left said docks or warehouses; and that the Secretary of State for the Navy Department shall give due orders for the early removal of the authorities and public offices from Moín to the new port of Limon. The importance of this decree in connection with the development of the mineral wealth of the Republic can scarcely

Author of "Cosmopolite's Statistical Reviews," &c., &c.
Copies can be had at the MINING JOURNAL Office, 26, Fleet-street, London,

In Chancery.

BAINES VERSUS EYTON.—FLINTSHIRE COAL FIELD.

HAMMER COLLIERY, near MOSTYN and HOLYWELL.

TO BE DISPOSED OF, BY TENDER (pursuant to an agreement made between the parties in the above-mentioned Cause), the LEASEHOLD INTEREST in this VALUABLE COLLIERY, situate on the eastern side of the River Dee, on the line of the Chester and Holyhead Railway, 18 miles from Chester, about 1½ miles from the Mostyn station, and 10 from Rhyl, and distant by water about 20 miles from Liverpool and Birkenhead, with a convenient shipping place belonging to the colliery on Llanerch-y-mor Gutter, which has been deepened at considerable cost by the present owners.

The colliery extends under about 2900 statute acres, and it is very probable comprises most, if not all, the seams known and worked in the district, and at the Mostyn colliery, of Messrs. Taylor and Co., which it adjoins on the west. The seams which have been opened are the Two Yard Bychton, the Soft Five Quarter, the Hard Five Quarter, the Stone Coal, the Durbog, and the Two Yard Mostyn. The thickness of these seams amounts in the aggregate to about 30 ft., none of them being of a less thickness than 4 ft., and the two last-named seams being each upwards of 6 ft. thick.

The Royalty also contains, it is believed, the Cannel Seams.

For the whole of these coals, forming an aggregate section of great thickness, there is a never-failing demand, especially in Liverpool and Birkenhead, for steam, gas, and other purposes. In the immediate neighbourhood of the colliery there is a great quantity of ironstone and limestone, the district offers every facility for iron manufacture, and from some of the seams of coal now being worked can be produced coke peculiarly suited for iron smelting.

The pits communicate with the Chester and Holyhead Railway by means of branches, and with the shipping place on the premises at Llanerch-y-mor. The lease is for a term of which 37 years are unexpired; the royalty is 1-14th of the selling price of the coal at the pit's mouth, until the annual sum of £1000 thus accrues due to the landlord, and until 66,000 tons of coal are gotten. After this the royalty is 1-21st part of such selling price. The minimum rent is £1000 a year.

The valuable plant, the bulk of which is quite new, will be included in the sale. The proprietors do not bind themselves to accept the highest or any tender. The lease may be inspected at the offices of Messrs. HELPS, PARKER, and BIRCH, solicitors, Chester, to whom, or to Messrs. ROBERTS and DICKSON, solicitors, Chester, tenders must be sent in on or before Dec. 7, 1867.

The colliery plans and workings may be seen and inspected, and further information obtained, at the Hammer Colliery, Mostyn, on an appointment being made with Mr. W. Y. CRAIG, of Milton House, Alsager, Stoke-upon-Trent, Staffordshire.

MINING PLANT FOR SALE.

TO BE SOLD, BY PUBLIC AUCTION, at the CONGLI MINES, NEWTOWNARDS, COUNTY DOWN, on Wednesday, the 4th day of December next, at the hour of Eleven o'clock A.M., if not previously disposed of, and of which due notice will be given, the ENTIRE MINING PLANT, comprising—

A beautiful CORNISH PUMPING ENGINE, 36 in. cylinder, 8½ ft. stroke, with TWO tubular BOILERS, 26 ft. long, and 5 ft. diameter.

A double-acting condensing ENGINE, 36 in. cylinder, 5 ft. stroke, with tubular BOILER, 31 ft. long, and 6 ft. diameter.

A splendid lathe, a crushing-machine, pumps, chains, blocks, pulleys, ropes, rails, kibbles, &c., of which printed catalogues may be had on application to

MORTIMER THOMSON, Killyleagh, County Down.

November 1st, 1867.

TO BE SOLD, BY PUBLIC AUCTION, on the 19th December, 1867, at the offices of Mr. Gautier, notary, No 217, Rue St. Honoré, Paris, THE COAL MINES belonging to the COMPANY OF SANTA ANA, Situate in SPAIN, in the ASTURIAS.

On the two shores of the River Nalon, 40 kilometres (about 25 miles) from Gijón, a seaport on the ocean. They consist of 220 pertencas, comprising a total superficies of 2800 hectares (about 700 acres), producing coal of the first quality, and presenting a richness and depth in the layers of beds, leaving nothing to be desired, and may be worked on a level—that is to say, without sinking shafts.

100,000 tons a year may be extracted, at the cost price of 5 frs. (4s 10d.) per ton. To these mines are connected—1st, a railway tram of 7 kilometres (about 4½ miles) in length, together with 5000 metres (about 5000 yards) of iron tramway, serving for the extraction and transport of the coal.—2d, four dwelling-houses for the engineers and superior officers.—3d, three dwellings for the overseers, and six houses for the workmen, forming together 44 habitations.—4th, 30 hectares (about 75 acres) of land, serving to work the mines.

The whole forming a single lot, the upset price of which is 300,000 francs (£12,000), with the facility for the liquidator, in case of no offers being made, of lowering by degrees the upset price, and proceed with the sale at the same meeting on the upset price then agreed upon.

TO BE SOLD, at the same time, forming a second lot:—
A MANUFACTORY and WORKSHOPS, the construction of which is in a very advanced state, and situated at 10 kilometres (about 2½ leagues) from Gijón, on the Langres Railway, at the upset price of 40,000 frs. (£1600), with the same conditions as above.

And as a third lot:—
1.—A MACHINE for WORKING the COAL, entirely new, and which cost 65,000 frs.—2. A MACHINE (Bérard) for CLEANING the SMALL COAL, upset price 30,000 frs. (£1200), with the same conditions as above.

For further particulars, apply to Mr. JACQUINOT, the liquidator for the sale and proprietor, at Darney (Vosges, France), and to the above-named notary, Mr. GAUTIER.

TO BE SOLD, BY PRIVATE CONTRACT, all those well-known IRON FOUNDERS' and HAMMER MILL WORKS, with the STOCK of IRON, STEEL, &c., situate in ST. AGNES, CORNWALL; also the MANAGER'S RESIDENCE, GROUND, and LABOURERS' COTTAGES, forming part and parcel of the said establishment.
Further particulars may be known on application to Messrs. HITCHINS and OPIE, St. Agnes; or Mr. S. T. G. DOWNING, Solicitor, Redruth.
Dated St. Agnes, Nov. 12, 1867.

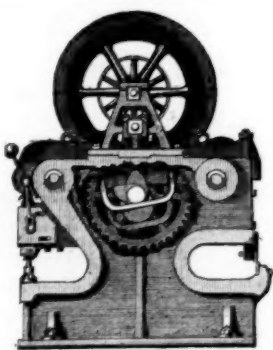
TO MINE ADVENTURERS AND AGENTS.

F O R S A L E, —
THE UNDERMENTIONED
ENGINES AND MATERIALS,
At the following very LOW PRICES:—

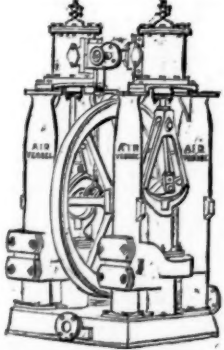
ONE highly-polished 40 inch cylinder PUMPING ENGINE, 9 feet stroke, with 11 ton boiler, in first-rate condition	£ 300 0 0
ONE very bright 50 inch cylinder PUMPING ENGINE, 10 feet stroke, with 19 tons of boilers, first piece of main rod and caps, in excellent condition	375 0 0
ONE 40 inch cylinder STAMPING ENGINE, very bright, and in splendid condition, with two first-rate boilers, weighing (with the mountings) about 25 tons, new connection rod, two new fly wheels, saddles, and shafts (about 23 tons in weight), and the whole of the castings and brass necessary to complete a steam stamp of 96 heads, entirely new, never having been erected	1000 0 0
[The last-named is an exceedingly cheap lot, being all new, excepting the indoors portion of the engine, which is equal to it.]	
ONE 30 inch cylinder PUMPING ENGINE, with 8 ton boiler	225 0 0
ONE 8-horse power PORTABLE STEAM ENGINE, for agricultural purposes	45 0 0
ONE 8-ton BOILER	50 0 0
Sixteen heads of STAMPS complete, in wood, iron, and brass, four came to the round, very good	30 0 0
TWO 16-head STAMP AXLES, new, four came to the round, never worked	34 0 0
Several 24-head STAMP AXLES, with the necessary saddles, brasses, braces, came, tongues, grate plates, stamp heads, entirely new, never worked, at per set of 24 heads	92 0 0
TWENTY 10 inch PUMPS, new, at per cwt.	0 5 0

A large quantity of secondhand PITWORK of all kinds, BALANCE BOBS, SHAFT BOBS, ROD PLATES and BOLTS, FLAT ROPES and PULLEYS, and various other materials at equally low prices.

Apply to—
WILLIAM DERRY,
HIGHER FOUNDRY, ST. AUSTELL, CORNWALL.



JOHN CAMERON'S
PATENT DOUBLE CAM LEVER
PUMPING AND SHEARING
MACHINE.
1½ x 1¼ in. x 24 in. — 5 tons, £185.
EGERTON STREET, HULME,
MANCHESTER.



JOHN CAMERON'S
STEAM PUMPS,
From 2 to 12 in. diameter,
SINGLE AND DOUBLE-ACTING.
EGERTON STREET, HULME,
MANCHESTER.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN THE MATTER OF THE COMPANIES ACT, 1862, and of the NORTH DOLCOATH MINING COMPANY.—TENDERS to be addressed to the Registrar of the said Court will be RECEIVED at the Registrar's Office, Truro, until the 3d day of December next, stating the highest price which will be given for the undermentioned

MINING MACHINERY AND MATERIALS, viz:—
27 9 ft. 11 in. pumps; 3 6 ft. 11 in. matching; 1 7 ft. 11 in. turn pipe; 1 10 ft. 10½ in. working barrel; 1 11 in. pole case; 1 9½ ft. 10 in. pole; stuffing box and gland; 1 6 ft. 11 in. windbore; 1 11 in. H and doorepiece; 15 fms. 2 in. bucket rods; 4 20 in. rod rolls; shieves, wheels, and rolls; flange bolts; two bugle chains; long lifting screw; 6 10 in. bucket prongs; horse whim and shaft tackle; 5 10 in. box prongs and drop clack; and a variety of other articles and effects in general use in mines, and now being in and upon North Dolcoath Mine, in the parish of Camborne, within the said Stannaries.
For further particulars, apply to Mr. CADE, Auctioneer, Helston.

HODGE, HOCKIN, AND MARRACK, Solicitors, Truro.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Cornwall.

IN THE MATTER OF THE COMPANIES ACT, 1862, and of the WEST CONDRURW MINING COMPANY.—By an Order made by His Honor the Vice-Warden of the Stannaries, in the above matter, dated the 18th day of November instant, on the petition of William Harvey, Henry Whitford, John West, William West, William John Rawlings, and William Husband, carrying on business at Hayle, within the Stannaries, under the style or firm of Harvey and Co., contributors and creditors of the said company, it was ORDERED that the WEST CONDRURW MINING COMPANY should be WOUND-UP by this Court under the provisions of the Companies Act, 1862.

HODGE, HOCKIN, AND MARRACK, Solicitors, Truro.
Dated Truro, November 19th, 1867.

MOLLAND MINE.

MR. WM. MANNING will offer FOR SALE, BY PUBLIC AUCTION, on Tuesday, 10th December next, at Twelve o'clock at noon, at MOLLAND MINE, situated about 16 miles from Tiverton and 8 miles from South Molton, the whole of the

MINING MATERIALS

Thereon, comprising a 7 and 14 inch CYLINDER ENGINE, combined with drawing gear attached.
A BOILER, nearly 5 tons; 110 fms. of 9 in. capstan rope; about 72 fms. of pump, 7, 9, and 10 in. bore; 2 plunger poles, 7 and 9 in., with door H pieces; a large quantity of old wrought and cast-iron; also the "halvans" on the mine.
For catalogues, or viewing the same, apply to Capt. THOS. BENNETTS, MOLLAND mine; or to Mr. MANNING, Auctioneer, South Molton.

IN THE COUNTY OF CARNARVON.

The ROWLAN and PENLAN SLATE QUARRIES, held upon lease, of which 86 years are unexpired, at a small ground-rent, and free from royalty.

MESSRS. GADSDEN, ELLIS, and SCORER WILL SELL, BY AUCTION, at the Mart, Tokenhouse-yard, in the City of London, on Friday, 28th December, at One for Two o'clock, by order of the mortgagee, the ROWLAN and PENLAN SLATE QUARRIES, extending over an area of 170 acres, situate in the parish of Caerhyn, in the county of Carnarvon, near the River Conway.

The property has been most favourably reported on by a well-known manager of slate quarries in North Wales, and from its admirable position and natural advantages for rapid and economic development, unusual width of vein, proximity to water carriage, coupled with the increasing demand for slates, it is fully believed that with moderate capital the property will prove a highly lucrative investment.

Particulars and conditions of sale may be obtained of Messrs. ELLIS and CROSS-FIELD, solicitors, 2, America-square, Minorities, London; of JOHN PARRY Esq., Llanberis; at the hotels at Carnarvon and Conway; at the Mart; and of Messrs. GADSDEN, ELLIS, and SCORER, 18, Old Broad-street, London.

TO MINING COMPANIES, MECHANICAL ENGINEERS, MERCHANTS, SHIPPING AGENTS, &c.

THE TITANIC STEEL AND IRON COMPANY (LIMITED)

MANUFACTURE A VERY SUPERIOR QUALITY OF STEEL FOR

BORERS, ROCK-DRILLING, AND MINING PURPOSES

GENERALLY; ALSO FOR

LATHE TOOLS, TAPS, DIES, DRILLS, PUNCHES, CHISELS, SHEAR BLADES, SNAPS, AND BOILER MAKERS' AND SMITHS' TOOLS.

SOLID CAST-STEEL HAMMERS

CAREFULLY MADE OF BEST CAST-STEEL TO ANY PATTERN.

The Company's STEEL is manufactured according to the processes and under the supervision of Mr. ROBERT MUSHET.

WORKS,—COLEFORD, FOREST OF DEAN. OFFICES,—No. 15, FOREGATE STREET, WORCESTER.
All communications to be sent to the offices.



PATENT FLEXIBLE TUBING, AND BRATTICE CLOTH FOR MINES

MANUFACTURED BY

ELLIS LEVER,

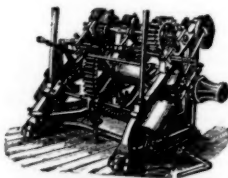
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PARIS EXHIBITION, Silver Medal for STEAM CRANES.
1867—AWARDS, Bronze Medal for DONKEY FEED PUMPS.

APPLEBY BROTHERS,

EMERSON STREET, SOUTHWARK,
LONDON, S.E.,

Engineers and Patentees of STEAM CRANES, DONKEY PUMPS, &c.



STEAM DECK WINCH.

PATENT DONKEY PUMPS.

Ram.	1½ in.	2 in.	2½ in.	3 in.	3½ in.	4 in.	4½ in.	5 in.	6 in.
Stroke.	12	12	12	12	12	12	12	12	12
Approx. horse-power.	15	22	30	40	55	75	110	120	150
* Gall. per hour.	280	400	550	800	1100	1500	2100	2800	3800
Approx. H.P.	15	22	30	40	55	75	110	120	150
Price	£10 5	£12 10	£15	£18	£21	£24	£28	£30	£35

* Calculated at 200 strokes per minute.

THE NEW PATENT INJECTOR.

FOR FEEDING BOILERS AND RAISING WATER FOR OTHER PURPOSES.

PRICES, DELIVERED IN LONDON.

Size.		Ram.	Stroke.	Approx. horse-power.		Approximate gallons thrown per hour.			Price.
No.		in.	in.	Boiler supplied.	At 100 rev.	150 rev.	200 rev.	p. min.	
1	1½	3		15	115	172	230		£10 10
2	2	3		22	180	270	360		12 12
3	2½	4		30	240	360	480		14 14
4	3	4		40	345	517	690		17 0
5	3½	5		55	475	712	930		19 10
6	4	5		75	585	877	1170		22 10
7	4½	6		90	720	1080	1440		25 10
8	5	6		110	870	1305	1740		28 10
9	5½	8		120	1030	1545	2060		31 10
10	6	8		150	1290	1935	2580		34 10
11	6½	8		230	2450	3675	—		45 0
12	7	8		460	4990	7350	—		55 0

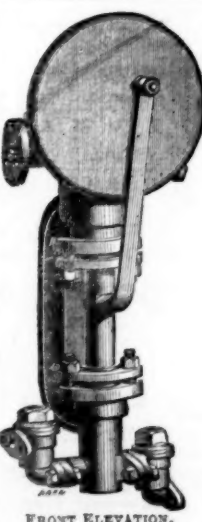
* The two last are double-acting.

Steam Regulator Valves, and also Check Valves, specially made to suit these Engines, can be supplied.
Terms: Nett Cash on Delivery.

A CIRCULAR, WITH FULL EXPLANATION AND COMPARISONS, WILL BE SENT ON APPLICATION.

BROWN, WILSON, AND CO.,

No. 80, CANNON STREET, E.C.; AND VAUXHALL IRON WORKS, LONDON, S.



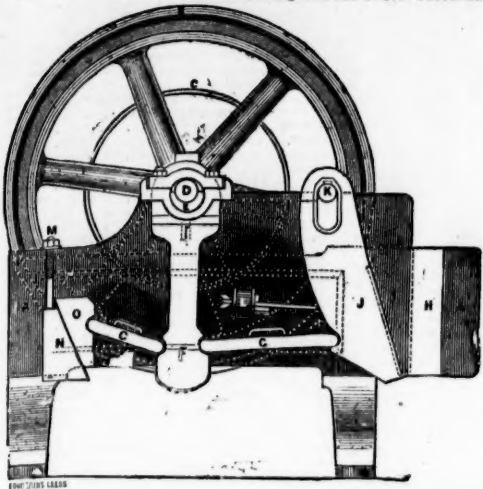
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TO MINERS, IRONMASTERS, MANUFACTURING CHEMISTS, RAILWAY COMPANIES, EMERY AND FLINT
GRINDERS, MCADAM ROAD MAKERS, &c., &c.

BLAKE'S PATENT STONE BREAKER,

OR ORE CRUSHING MACHINE,
FOR REDUCING TO SMALL FRAGMENTS ROCKS, ORES, AND MINERALS OF EVERY KIND.

It is rapidly making its way to all parts of the globe, being now in profitable use in California, Washoe, Lake Superior, Australia, Cuba, Chili, Brazil, and throughout the United States and England. Read extracts of testimonials:—



The Parys Mines Company, Parys Mines, near Bangor, June 6.—We have had one of your stone breakers in use during the last twelve months, and Captain Morcom reports most favourably as to its capabilities of crushing the materials to the required size, and its great economy in doing away with manual labour.
For the Parys Mining Company, JAMES WILLIAMS.

H. R. Marsden, Esq.—*Ecton Emery Works, Manchester.*—We have used Blake's patent stone breaker made by you, for the last 12 months, crushing emery, &c., and it has given every satisfaction. Some time after starting the machine a piece of the moveable jaw about 20 lbs. weight, chilled cast-iron, broke off, and was crushed in the jaws of the machine to the size fixed for crushing the emery.
H. R. Marsden, Esq. THOS. GOLDSWORTHY & SONS.

Alkali Works, near Wednesbury.—I at first thought the outlay too much for so simple an article, but now think it money well spent.
WILLIAM HUNT.

Welsh Gold Mining Company, Dolgelly.—The stone breaker does its work admirably, crushing the hardest stones and quartz.
WM. DANIEL.

Our 15 by 7 in. machine has broken 4 tons of hard whinstone in 20 minutes, Messrs. OAD and MADDISON, Stone and Lime Merchants, Darlington.

Kirkless Hall, near Wigan.—Each of my machines breaks from 100 to 120 tons of limestone or ore per day (10 hours), at a saving of 4d. per ton.
JOHN LANCASTER.

Ovoca, Ireland.—My crusher does its work most satisfactorily. It will break 10 tons of the hardest copper ore stone per hour.
WM. G. ROBERTS.

General Fremont's Mines, California.—The 15 by 7 in. machine effects a saving of the labour of about 30 men, or \$75 per day. The high estimation in which we hold your invention is shown by the fact that Mr. Park has just ordered third machine for this estate.
SILAS WILLIAMS.

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MEADOW LANE, LEEDS,
ONLY MAKER IN THE UNITED KINGDOM.

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MAKERS OF
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IMPROVED WATER GAUGES, BLOW-OFF COCKS, SAFETY VALVES, FUSIBLE PLUGS, &c.,
As recommended by the Steam-Boiler Associations.

GENERAL STEAM WORK, WHEEL VALVES, SLUICE VALVES, COCKS, &c.
IMPROVED GAS VALVES.

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Wholesale Agents for Bourdon's, Schaeffer's, and other good Makers of

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Richard's, McNaught's, and Hopkinson's

STEAM ENGINE INDICATORS.

Wrought Iron Tubes and Fittings for Steam and Gas Work.

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NEAR THE EXCHANGE.
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PARIS EXHIBITION, 1867.—AWARDED THE ONLY FIRST-CLASS MEDAL FOR CRUCIBLES.

SILVER MEDALS CLASSES 40—47.

THE PATENT PLUMBAGO CRUCIBLE COMPANY.

SOLE MANUFACTURERS UNDER MORGAN'S PATENT.

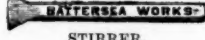
BATTERSEA WORKS, LONDON, S.W.

These Crucibles (MORGAN'S PATENT) were the only ones to which Prize Medals were awarded in London, 1862; Dublin, 1865; New Zealand, 1865; and Oporto, 1865.

They have been in use for many years in the English, Colonial, French, and other Foreign Mints; the English, French, and other Arsenals; and have been adopted by most of the large Engineers, Founders, and Refiners at Home and Abroad.

The capabilities which have now for more than twelve years distinguished these Crucibles are the following:—
Their quality is uniform. They withstand the greatest heat without danger. Their average durability for Gold, Silver, Copper, and other ordinary metals is forty to fifty pourings, in some cases reaching one hundred. They never crack, and heat more rapidly than any other kind. One annealing only is required. Change of temperature has no effect. They can when hot from the furnace be dipped in cold water with safety. The saving of labour and metal is very great. In Steel Melting the saving of fuel has been demonstrated to amount to a ton and a half to every ton of steel used. For Zinc they last longer than iron pots, and save the great loss which arises from mixture with iron. Those for Malleable Cast-iron show an average working of seven days, doing each day nearly double the work of any other crucible.

As these crucibles last much longer than any others, it follows that the saving of metal must be great, because to each worn crucible a quantity of metal adheres. In fact, comparing these with other crucibles, the saving of metal and fuel is more than equivalent to their cost.



A are made in sizes varying from 2 ozs. to any required capacity, and are marked by the quantity of kilogrammes they will contain; thus No. 100 will contain 100 kilogrammes.

B differ in shape, but correspond in all other respects with A, and are similarly marked.

C are marked in English pounds—thus, a crucible marked 60 will contain 60 lbs.

D are made expressly for steel in various sizes.

CRUCIBLES MADE TO ANY SHAPE AND SIZE TO ORDER.

Some unprincipled manufacturers having made

such close imitations of our Trade Mark as cannot

fail to deceive the public, we have deemed it ad-

visable to alter our Mark as here shown. It will

In all future orders, please specify "MORGAN'S PATENT," and address to

BATTERSEA WORKS, LONDON, S.W.



be observed that the alteration consists in the

OMISSION of the words—"DEPOTS AT PARIS

AND ROTTERDAM," and the ADDITION of the

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Obtained the PRIZE MEDALS at the "ROYAL EXHIBITION" of 1851; at the "INTERNATIONAL EXHIBITION" of 1862, in London; at the "IMPERIAL EXPOSITION" held in Paris, in 1855; at the "INTERNATIONAL EXHIBITION," in Dublin, 1865; and at the "UNIVERSAL EXPOSITION," in Paris, 1867.

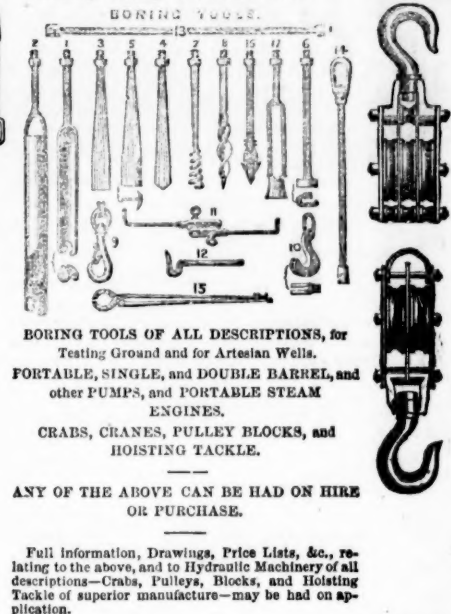


BICKFORD, SMITH, AND CO.,
of TUCKERMILL, CORNWALL, MANUFACTURERS OF PATENT SAFETY-FUSE, having been informed that the name of their firm has been attached to fuse not of their manufacture, beg to call the attention of the trade and public to the following announcement:—
EVERY COIL OF FUSE MANUFACTURED BY THEM HAS TWO SEPARATE THREADS PASSING THROUGH THE COLUMN OF GUNPOWDER, AND BICKFORD, SMITH, AND CO. CLAIM SUCH TWO SEPARATE THREADS AS THEIR TRADE MARK.

S. OWENS AND CO. (LATE CLINTON AND OWENS)

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HYDRAULIC AND GENERAL ENGINEERS.

MANUFACTURERS OF PUMPS OF EVERY DESCRIPTION FOR HAND,
HORSE, STEAM, OR WATER POWER



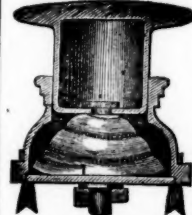
BORING TOOLS OF ALL DESCRIPTIONS, for
Testing Ground and for Artesian Wells.
PORTABLE, SINGLE, and DOUBLE BARREL, and
other PUMPS, and PORTABLE STEAM
ENGINES.
CRABS, CRANES, PULLEY BLOCKS, and
HOISTING TACKLE.

ANY OF THE ABOVE CAN BE HAD ON HIRE
OR PURCHASE.

Full information, Drawings, Price Lists, &c., relating to the above, and to Hydraulic Machinery of all descriptions—Crabs, Pulleys, Blocks, and Hoisting Tackle of superior manufacture—may be had on application.

THOMAS TURTON AND SONS,

MANUFACTURERS OF



CAST STEEL FOR PUNCHES, TAPS, and DIES,
TURNING TOOLS, CHISELS, &c.
CAST STEEL PISTON RODS, CRANK PINS, CON-
NECTING RODS, STRAIGHT and CRANK
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FORGINGS OF EVERY DESCRIPTION.
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Where the largest stock of steel, files, tools, &c., may be selected from.



GUN COTTON

Is the safest and

STRONGEST

EXPLOSIVE

For every description

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WORK.

A charge of any given size exerts six times the explosive force of gunpowder. The enormous power confined in a short length at the bottom of the hole allows of a much greater amount of work being placed before each blast, saving considerably in the labour of drilling.

Charges are made of every diameter required, the length varying with the diameter. Any number may be placed in a hole. Each charge is fully equal to one-fifth of a pound of powder.

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WORKS, STOWMARKET.
LONDON AGENT,—MR. THORNE.

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DR. WATSON (of the Lock Hospital), F.R.A.S., Member of the College of Physicians and Surgeons, on the SELF-CURE OF NERVOUS and PHYSICAL DEBILITY, Lowness of Spirits, Loss of Appetite, Timidity, Incapacity for Exertion, &c., with means for perfect restoration. Sent free for two stamps by Dr. WATSON, No. 1, South-crescent, Bedford-square, London. Consultations daily from 11 till 3, and 6 till 8; Sundays, 10 till 1.

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WONDERFUL MEDICAL DISCOVERY, demonstrating the true causes of Nervous, Mental, and Physical Debility, Lowness of Spirits, Indigestion, Want of Energy, Premature Decline, with plain directions for perfect restoration to health and vigour, WITHOUT MEDICINE. Sent free on receipt of two stamps, by W. HILL, Esq., M.A., Berkeley House, South-crescent, Russell-square, London, W.C.

By post, from the author, 1s.; sealed ends, 2s. stamps.

MANHOOD: A Medical Essay on the Cause and Cure of Premature Decline in Man, founded on the results of a successful practice of 30 years in the treatment of nervous and physical debility, sterility, impotency, effects of climate, and infection.

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REVIEWS OF THE WORK.
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Also, from the same author, for 1s., or 16 stamps sealed,
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 Prince of Wales 50s. - 52s. 1/2
 Frontino 17s. - 19s.
 Pestorena (Dis.) 1-16 - 1-16 1/2
 Providence 28 1/2 - 28 3/4
 Clifford 6 1/2 - 6 3/4
 Great Vore 17 1/2 - 18
 Wheel Grenville 25s. - 25s.
 East Russell 32s. - 32s.
 North Croft 2 1/2 - 2 1/2
 Don Pedro (Prem.) 2 - 2 1/2
 Anglo-Brazilian 10s. - 11s.
 East Carr Brea 45s. - 45s.
 East Caradon 6 1/2 - 7
 East Lovell 8 - 8 1/2
 Frank Mills 8 1/2 - 8 3/4
 South Condurrow 37s. - 39s.
 East Grenville 150 - 155
 Marke Valley 6 - 6 1/4
 Drake Walls 11s. - 11s. 3/4
 Great Retallack 3 1/2 - 3 3/4
 Wheel Crebhor 4s. - 4s. 6s.
 Chontales (Dis.) 1 1/2 - 1 3/4
 West Caradon 7 - 7 1/4
 South Frances 30 - 32
 East Basset 10 1/2 - 11 1/2
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 North Downs 17s. - 18s.
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Bankers: London and Westminster, Lothbury.

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 Mine Shares and all Stock Exchange securities dealt in at close market prices
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 Bonds pay from 5 to 8 per cent. as regularly as Consols. Turkish 1865 Loan
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AND GENERAL AGENTS, 17, CROSS STREET, MANCHESTER.
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 50 New Birch Tor and 50 Great North Downs. 50 Great Mona (second
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 10 W. Great St. George. 10 W. Great St. George.
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 SIVE MINE SHARES, either for cash or the fortnightly settlement at close
 market prices.

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 Rosa Grande, Chontales, Port Phillip, and Pestorena.
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 Full and reliable information on application.
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 mining experience in Cornwall, several years of which he has had the
 entire management of mines therein, enables him to GIVE GOOD ADVICE
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MR. LEDWARD (of Chester), has FOR SALE a few SHARES
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 dom occurs, except at very high premiums; the returns of ore (which have for
 some time covered the cost) are increasing every month; and the mines are cer-
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WANTED TO PURCHASE, SHARES in the following MINES:—
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GOVERNMENT and other SECURITIES BOUGHT and SOLD at net
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Foreign funds—Brazilian, Chilean, Dutch, Egyptian, Greek, Italian, Mexican,
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 Preference Railway Stocks, Debenture Bonds, and ordinary
 Stocks and Shares in Colonial Government Securities—Canada, Cape, New Brun-
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 Mortgages and Loans negotiated in all saleable or unquestionably valuable
 securities. Miscellaneous.

ON SALE—Government Securities paying from 6 to 8 per cent., and other
 properties paying from 10 to 12 and up to 15 per cent.

NOTICE.—CAPT. S. M. RIDGE, of LLANIDLOES
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 Mines, and others, in Shropshire and Wales), is NOW OPEN to INSPECT and
 faithfully REPORT UPON ANY LEAD MINE in either of these localities that
 may be confided to his care, having had better than 30 years' experience in lead
 mining, as miner and agent.—Address, Capt. S. M. RIDGE, Llanidloes, Mont-
 gomeryshire.

THE LINCOLN GOLD COMPANY (LIMITED).

To be Registered under the Companies Acts, 1862 and 1867.

Capital £100,000, in 80,000 shares of £2 each.
 Of these, 40,000 shares, fully paid-up, will be offered to the vendors; 20,000, to be
 paid on, are offered to the public, the holders of such last-mentioned
 shares being, under contract with vendors, after payment of
 the purchase-money, entitled to a free allotment of the
 remaining 20,000 shares as fully paid-up.

10s. per share payable on application, 10s. per share on allotment, and the
 balance of £1 per share 14 days after receipt of intelligence that
 the property has been taken over by the company.
 Allotments will be made in accordance with priority of application.
 Where no allotment is made the deposit will be returned in full.

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JOHN WALTER LUKIS, Esq., Woodlands, Isleworth.

THOMAS STANTON, Esq., 11, Portchester-square, Hyde-park, Director Chon-
 tales Gold Mining Company.

HENRY R. TREHERN, Esq., Chifton-villas, Maida Hill.

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EDMUND W. WINGROVE, Esq., South End House, Twickenham, Director
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CONSULTING ENGINEER.

JOHN ARTHUR PHILLIPS, Esq.,
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ABRIDGED PROSPECTUS.

This company has been formed for the purpose of purchasing and working the
 Harpending and Quarry Gold Mines, situate in the township of Lincoln, Placer
 county, California.

J. A. Phillips, Esq., has consented to proceed and conduct a mill trial, and
 verify the above statements, before any payments are made, or the property taken
 over.

Full prospectuses, and forms of application for shares, can be obtained at the
 bankers, solicitors, or at the offices of the company.

THE MINING SHARE LIST.

BRITISH DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Per share.	Last paid.
1500 Alderley Edge, c. Cheshire	10 0 0	—	—	—	9 2 8	0 5 0	Nov. 1867
200 Botallack, c. St. Just	91 5 0	—	—	—	488 15 0	5 0 0	May 1866
4000 Brookwood, c. Buckfastleigh	1 11 0	—	—	10 1/2	0 5 0	0 2 6	Sept. 1866
1000 Broulford, c. Cumberland	12 0 0	—	—	—	8 17 0	0 10 0	Nov. 1867
6400 Cashwell, c. Cumberland	2 10 0	—	—	—	0 16 0	0 10 0	Aug. 1866
910 Cargill, c. Newlyn	15 5 7	—	—	—	13 15 0	1 0 0	Feb. 1866
569 Cregebrasse and Penkelt	—	—	—	6 1/2 7 1/2	1 0 0	1 0 0	Oct. 1867
867 Cwm Erwin, c. Cardiganshire	7 10 0	—	—	—	24 18 0	0 0 0	Oct. 1867
128 Cwmystwith, c. Cardiganshire	60 0 0	—	—	—	379 10 0	3 0 0	April 1867
280 Derwent Mines, c. Durham	300 0 0	—	—	—	174 10 0	5 0 0	June 1867
1024 Devon, c. Devon	1 0 0	—	—	420 430	1081 0 0	7 0 0	Nov. 1867
653 Ding Dong, c. Gwynedd	49 14 6	18	—	—	0 10 0	0 10 0	Sept. 1867
15000 Great Laxey, c. Isle of Man	128 17 6	—	—	—	834 10 0	3 0 0	Oct. 1867
6144 East Caradon, c. St. Cleer	2 14 6	6 1/2	5 1/2	6	14 11 6	0 2 0	July 1867
800 East Darren, c. Cardiganshire	32 0 0	—	—	—	148 10 0	2 0 0	Oct. 1867
128 East Pool, c. Pool, Illogan	24 5 0	—	—	—	417 10 0	5 0 0	Nov. 1867
1506 East Wheel Lovell, c. Wendron	3 9 0	8 1/2	8 1/2	—	3 16 0	0 6 8	Aug. 1867
2800 Foxdale, c. Isle of Man	25 0 0	—	—	—	71 0 0	0 10 0	Sept. 1867
5000 Frank Mills, c. Christow	3 18 6	—	—	—	3 5 0	0 5 0	Feb. 1866
15000 Great Laxey, c. Isle of Man	128 17 6	18	—	—	7 5 0	0 10 0	Sept. 1867
2908 Great Wheel, c. St. Helston	40 0 0	18	17 1/2	17 1/2	12 0 0	0 7 4	Sept. 1867
1024 Herodfoot, c. near Liskeard	8 10 0	—	—	—	48 10 0	1 10 0	Oct. 1867
6000 Hingston Down, c. Calstock	5 10 6	—	—	—	0 10 0	0 5 0	April 1866
400 Lisburne, c. Cardiganshire	18 15 0	—	—	—	495 10 0	3 0 0	Oct. 1867
3000 Maes-y-Safn, c. Flint	20 0 0	31	29 31	—	3 0 0	1 0 0	Nov. 1867
9000 Marke Valley, c. Caradon	4 10 6	6 1/2	6 1/2	6 1/2	4 10 0	0 4 0	Oct. 1867
3000 Minera Boundary, c. Wrexham	25 0 0	185	170 180	—	223 13 0	4 15 0	Nov. 1867
20000 Mining Co. of Ireland, c. L. c. L.	7 0 0	—	—	17	—	0 5 7	Jan. 1867
40000 Myndy Iron Ore	3 5 0	—	—	—	0 6 6	0 2 6	Mar. 1866
200 Parys Mines, c. Anglesey	50 0 0	—	—	—	157 10 0	5 0 0	Jan. 1866
12800 Prince of Wales, c. Calstock	0 12 6	1 1/2	50s. 52s.	—	0 3 0	0 10 0	Nov. 1867
6000 Prosper United, c. St. Hilary	8 14 0	—	—	—	0 5 0	0 5 0	Feb. 1867
1120 Providence, c. Uny Lelant	10 6 7	29 1/2	29 30	—	83 6 0	0 10 0	Aug. 1867
512 South Laxey, c. Chertsey	3 6 0	—	—	—	52 10 0	0 10 0	Sept. 1867
3000 Don Pedro, c. Cardigan	3 6 0	—	—	—	0 11 0	1 6 0	Oct. 1867
496 So. Wh. Frances, c. Illog. It.	18 18 9	32 1/2	31 33	—	372 13 6	1 0 0	Nov. 1867
508 Summer Hill, c. Mold	3 13 6	—	—	—	1 7 6	0 7 6	Nov. 1867
6000 Tincroft, c. St. Pool, Illogan	9 0 0	13	13 1/2	14 1/2	18 10 0	0 5 0	Aug. 1867
2000 Trumpet Cons., c. Helston	11 10 0	—	—	—	11 12 0	0 7 6	Aug. 1867
400 W. Chiverton, c. Perranzabuloe	10 0 0	72	—	—	31 7 6	2 0 0	Aug. 1867
3000 W. Wheel Seton, c. Camborne	47 10 0	190	180 190	—	480 10 0	4 0 0	Oct. 1867
512 West Laxey, c. Chertsey	3 6 0	85	90 85	—	62 0 0	2 0 0	Oct. 1867
10000 Wheel Friendship, c. Tavistock	20 0 0	—	—	—	300 10 0	0 10 0	Nov. 1866
4235 Wheel Killy, c. St. Agnes	5 4 6	—	23 3 1/2	3 1/2	3 3 0	0 2 0	Nov. 1867
1024 Wheel Mary Ann, c. Menheniot	8 0 0	21	19 1/2	20 1/2	62 10 0	0 15 0	Sept. 1867
2000 Wheel Rose, c. Scourie	—	—	—	—	1 0 0	0 10 0	Feb. 1866
336 Wheel Seton, c. Camborne	58 10 0	100	97 1/2	102 1/2	249 15 0	3 0 0	Oct. 1867
1040 Wheel Treliwayn, c. Liskeard	5 17 0	7	—	—	54 14 6	0 4 0	June 1867
3000 Whitehill Lead, c. Chertsey	0 5 0	—	17s.	—	0 10 0	0 10 0	July 1867
17000 Wicklow, c. L. Wicklow	2 10 0	15 1/2	—	—	48 10 0	0 15 0	Oct. 1867

FOREIGN DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Per share.	Last paid.
25000 Alamillos, c. Spain	2 0 0	—	—	—	0 1 0	0 1 0	Oct. 1867
20000 Australasian, c. South Australia	7 7 6	—	—	7 1/2	0 1 0	0 1 0	Aug. 1867
15000 Cape Copper, c. Cape	7 7 6	—	—	7 1/2	0 1 0	0 1 0	Aug. 1867
2464 Burras Burras, c. North del Rey	0 14 0	3	2 1/2	2 1/2	0 7 0	0 3 6	Aug. 1867
25000 Fortuna, c. Spain	2 0 0	—	—	—	1 7 4	0 2 0	Oct. 1867
20000 Gen. Mining Assoc., c. Nova Scotia	20 0 0	—	—	14 16	23 10 0	0 15 0	June 1867
10000 Gonnese, c. L. [5000 £5 pd., 5000 £4 pd.]	—	—	—	—	10 per cent.	—	July 1867
60000 Kapunda Mining Co., c. Australia	1 0 0	1/2	3/4	3/4	0 10 0	0 10 0	Nov. 1867
15000 Llanures, c. Spain	3 0 0	—	—	—	11 8 4	0 2 0	Oct. 1867
50000 Pannicillo, c. Chile	100 0 0	—	—	—	10 per cent.	—	Yearly
60000 Pestorena, c. Italy	2 12 6	2 1/2	2 1/2	2 1/2	0 2 0	0 2 6	Mar. 1867
100000 Pontglaud, c. France	20 0 0	—	—	—	4 14 3	0 11 0	June 1867
10000 Port Phillip, c. Clunes	1 0 0	1 1/2	1 1/2	1 1/2	0 18 6	0 1 0	Oct. 1867
20000 Scottish Australian Min. Co.	1 0 0	—	—	—	7 1/2 per cent.	—	Nov. 1867
11000 St. John del Rey, Brazil	15 0 0	61	59 61	—	77 5 0	4 10 0	June 1867
50000 Victoria (London) [50000 £1 pd., 25000 12s. 6d. pd.]	—	—	—	—	0 0 0	0 1 0	Jan. 1866
40000 West Canada Mining Co.	1 0 0	—	—	—	0 19 6	0 15 0	Oct. 1867

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus.	divs.	last	Call.
100000	Anglo-Brazilian, c. Brazil	0 10 0	—	—	—	—	Nov. 1866
125000	Anglo-Italian, c. Italy	0 5 0	—	—	—	—	May 1867
25000	Burra Burra, c. South Australia	5 0 0	—	—	—	—	—
25000	Capula, s. Mexico	1 12 0	—	—	—	—	Aug. 1866
30000	Chontales, c. s. Nicaragua	4 10 0	—	3 1/2	3 1/2	—	Nov. 1867
12000	Cobre Copper Company, c. Cuba	43 10 0	—	—	—	—	May 1867
10000	Coplapo Mining Company, Chile	16 10 0	—	—	—	—	—
10000	Coplapo Smelting, Chile	10 10 0	—	—	—	—	April 1866
3000	Copper Mines Co. of Australia [150 £10 pd., 150 £5 pd.]	150 £10 pd.	—	—	—	—	Nov. 1866
10000	El Chico Silver Mining and Reduction Company	5 0 0	—	—	—	—	Nov. 1866
8000	English and Canadian Mining Company	5 0 0	—	—	—	—	Fully pd.
40000	Fortune Copper Mining Co. of Western Australia	2 0 0	—	—	—	—	Fully pd.
50000	Frontino and Bolivia, c. New Granada	1 15 0	18s.	—	1	—	June 1867
10000	Great Barrier Land, Mining, &c. New Zealand	5 0 0	—	—	—	—	Fully pd.
80000	Great Northern, c. South Australia	1 11 0	—	—	—	—	Sept. 1862
7927	Guantanamo, c. Cuba	1 11 0	—	—	—	—	—
83000	Marquita, c. Brazil	0 17 6	—	—	—	—	Sept. 1867
12500	Nerbudda Coal and Iron, India	5 0 0	—	—	5	—	Aug. 1865
61000	Nova Quebrada, c. Venezuela	3 10 0	—	—	—	—	—
50000	Nova Scotia Land and Gold	1 15 0	—	—	—	—	Sept. 1865
15000	Otea, c. New Zealand	2 0 0	—	—	—	—	Fully pd.
10178	Rhenish Consolidated, £ 6000 £3 pd., 4178 £2 10s. pd.	—	—	—	—	—	May 1866
100000	Rosa Grande, c. Brazil	0 12 0	—	3 1/2	1/2	3/4	Sept. 1867
10000	San Pedro de Macoris, c. M. R.	4 0 0	—	—	—	—	Sept. 1866
10000	San Roque, L. Spain	5 0 0	—	—	—	—	Fully pd.
100000	Taquaril, c. Brazil	0 5 0	—	—	—	—	Oct. 1867
6000	Terresen, s.-i. Isle of Sardinia	2 0 0	—	—	—	—	—
43174	United Mexican, s. Mexico	28 5 0	—	—	1 1/2	—	—
10000	Vancouver, c. B. C.	6 0 0	—	—	—	—	—
6000	Val Sassam, c. s. Italy	7 0 0	—	—	—	—	Aug. 1867
10000	Vicor Emanuel, c. Italy	5 0 0	—	—	—	—	Fully pd.
20000	Washoe, c. Nevada	5 0 0	—	—	—	—	Fully pd.
80000	Worthing, c. South Australia	1 0 0	—	—	1/2	1/2	Fully pd.
75000	Yorke Peninsula, South Australia	1 0 0	—	—	—	—	Fully pd.
45000	Yudasmutana, c. South Australia	3 0 0	—	—	3/4	1	Fully pd.